CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
1.	Aaron Sanjith1, John Mary2, Arthur Anupriya3, Alexander Sunithi4, Kumar Shyam5 and Alexander Mathew5 Stroke Prevention Posters - PRV.01 Hereditary Haemorrhagic Telangiectasia (Osler-Weber-Rendu Syndrome) presenting with artery of Percheron infarction International Journal of Stroke; 2017, 12 39-40 **AUTHOR INFORMATION:** 1**Christian Medical College, Vellore,** Tamil Nadu 2**Christian Medical College vellore**, Tamil nadu 3**Christian Medical College vellore**, Tamil Nadu 4**Christian Medical College vellore**, Tamil Nadu 5**Christian Medical College vellore**, Tamil Nadu Introduction: A 30 year old lady presented to us after 24 hours following a history of sudden onset of drowsiness which lasting for 4 hours She had partially improved. She had no known co-morbidities except for history of epistaxis. She was fully conscious; but had fluctuations in orientation and slight inability to obey commands and comprehend. There was no motor or cranial nerve deficits. MRI showed Bilateral thalamic infarcts in the paramedian location suggestive of an artery of Percehron infarction. Workup towards deep venous system thrombosis, infective endocarditis, vasculitis and CNS infection were normal. There was no family history. Methods: A Transthoracic ECHO was normal. TCD bubble study revealed HITS suggesting a R – L Shunt. Trans esophageal Echo (done without bubble contrast) was negative. CT angiogram showed multiple pulmonary and hepatic arteriovenous malformations. Hemorrhagic telangiectasia were present on the nasal septum, turbinates and the nasopharynx. Telangiectatic vessels were seen on the conjunctiva. Results: She fulfilled Curaçao's diagnostic criteria for definite Hereditary Haemorrhagic Telangiectasia (Rendu-Osler-Weber syndrome). Her stroke being due to a Paradoxical embolism from one of the pulmonary arteriovenous malformations. She was treated with endovascular coiling of the larger pulmonary arteriovenous malformations to avoid future neurologic complications. A Close follow-up was advised. Conclusion: Here we report a rare presentation of a rare syndrome. History of epistaxis and haemoptysis with a careful cutaneous and mucosal examination will be helpful in suspecting this condition.	**INT**	**JUL TO DEC**	**NEUROLOGICAL SCIENCES, OPHTHALMOLOGY, RADIOLOGY**	**NO PMID** **WOS:**000410995600101 **Impact Factor:**3.314 H-Index:46
2.	Aaron, S., Arthur, A., Prabakhar, A. T., Mannam, P., Shyamkumar, N. K., Mani, S., Mathew, V., Peter, J., Sivadasan, A., Alexander, A., Karthik, M., Benjamin, R. N.	**NAT**	**JUL TO DEC**	**NEUROLOGICAL SCIENCES,**	**PMID:**28904465 **PMCID:**5586128

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	and Alexander, M. Spectrum of Visual Impairment in Cerebral Venous Thrombosis: Importance of Tailoring Therapies Based on Pathophysiology Ann Indian Acad Neurol; 2017, 20 (3): 294-301 **Address:** Department of Neurological Sciences, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India; Department of Ophthalmology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India; Department of Radiology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Visual impairment can complicate cerebral venous thrombosis (CVT). Here, we describe the various pathophysiological mechanisms and treatments available. A retrospective chart review of all patients treated for CVT in a large quaternary teaching hospital was done, and cases with visual impairment due to CVT were identified. The various mechanisms causing visual impairment in CVT were (1) raised intracranial pressure (ICP) caused by venous thrombosis without venous infarcts resulting in a benign intracranial hypertension-like presentation of CVT, (2) venous infarcts involving the occipital cortex, (3) raised ICP following the development of a secondary dural arteriovenous (AV) fistula, and (4) arterial occipital infarcts due to posterior cerebral artery compression secondary to herniation in large venous infarcts. Apart from using systemic anticoagulants to attempt recanalization and drugs with carbonic anhydrase inhibitor activity to reduce the ICPs, treatment modalities employed to save vision were (1) recanalization by local thrombolysis, stenting, or mechanical devices; (2) cerebrospinal fluid diversion procedures such as theco-periotoneal shunting; (3) optic nerve sheath fenestration; and (4) specific treatment for conditions such as dural AV fistula occurring as a late complication. CVT can cause visual impairment through different pathophysiological mechanisms. Depending on the mechanism, treatment strategies need to be tailored. Furthermore, very close monitoring is needed both in the acute and in the follow-up period, as new pathophysiological mechanisms can arise, compromising the vision. This may require a different treatment approach. Literature on this aspect of CVT is lacking.			**OPHTHALMOLOGY, RADIOLOGY**	**Impact Factor:**0.950 H-Index:17
3.	Aaron, S., Mani, S., Prabhakar, A. T., Babu, P. S., Kumar, S., Benjamin, R. N., Sivadasan, A., Muthusamy, K., Patil, A. K., Mathew, V. and Alexander, M. Sonothrombolysis for acute ischemic stroke - Break on through to the other side Neurol India; 2017, 65 (1): 52-57	**NAT**	**JAN TO JUN**	**NEUROLOGICAL SCIENCES, RADIOLOGY**	**PMID:**28084238 **Impact Factor:** 1.758 H-Index:39

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Department of Neurological Sciences, Neurology Unit, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Radiology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. **BACKGROUND:** Intravenous (IV) tissue plasminogen activator (tPA) infusion combined with transcranial low-frequency ultrasound waves targeted on the occluded arterial segment (sonothrombolysis) can increase recanalization in large artery-acute ischemic stroke (LA-AIS). **AIMS:** To evaluate the benefits of sonothrombolysis in LA-AIS. SETTINGS AND DESIGNS: An open-labeled observational study done in a quaternary care teaching hospital. METHODOLOGY: Patients with LA-AIS within the window period (<4.5 h) with no contraindications for IV-recombinant tPA were sonothrombolysed. Recanalization was monitored and graded using the transcranial Doppler thrombolysis in brain ischemia (TIBI) flow criteria and also by time of flight magnetic resonance angiography using a modified thrombolysis in myocardial infarction score. Parenchymal changes were assessed using computed tomography (CT) or diffusion-weighted imaging-Alberta Stroke Programme Early CT Score. National Institutes of Health Stroke Scale (NIHSS) and modified Rankin Scale (mRS) were used to assess the outcome. **RESULTS:** Eighteen patients underwent sonothrombolysis and the mean onset to needle time was 138 min (range 65-256). TIBI residual flow grade of >/=2 was seen in 15 of 18 patients (83%). Immediate dramatic improvement (NIHSS score </=3 points or improvement by >/=10 points) was seen in 6 of 18 patients (30%) and in 9 of 18 patients (50%) within the next 24 h. Two patients (one with TIBI 0, another with re-occlusion) underwent mechanical thrombectomy post-sonothrombolysis. Symptomatic hemorrhage occurred in 5.5% of the patients. At 6 months, 2 of 18 patients (11%) died and 10 of 16 patients (63%) achieved mRS </=2. **CONCLUSIONS:** Sonothrombolysis appears to be a safe way to augment the effect of tPA without increasing the door to needle time with the added advantage of observing flow through theoccluded artery in real time.				
4.	Abbas, S., Kini, A., Srivastava, V. M., M, M. T., Nair, S. C., Abraham, A., Mathews, V., George, B., Kumar, S., Venkatraman, A. and Srivastava, A. Coexistence of aberrant hematopoietic and stromal elements in myelodysplastic syndromes Blood Cells Mol Dis; 2017, 66 37-46 **Address:** Centre for Stem Cell Research, A Unit of inStem Bengaluru, **Christian**	**INT**	**JUL TO DEC**	**CENTRE FOR STEM CELL RESEARCH, CYTOGENETICS, GENERAL PATHOLOGY, TRANSFUSIO**	**PMID:**28822917 **Impact Factor:** 1.882 H-Index:77

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Medical College Campus, Bagayam, Vellore, Tamil Nadu, India; Cytogenetics Unit, **Christian Medical College, Vellore,** Tamil Nadu, India; Department of General Pathology, **Christian Medical College, Vellore,** Tamil Nadu, India; Department of General Pathology, **Christian Medical College, Vellore,** Tamil Nadu, India; Department of Transfusion Medicine and Immunohematology, **Christian Medical College, Vellore,** Tamil Nadu, India; Department of Hematology, **Christian Medical College, Vellore,** Tamil Nadu, India; Centre for Stem Cell Research, A Unit of inStem Bengaluru, **Christian Medical College Campus, Bagayam, Vellore**, Tamil Nadu, India; Department of Hematology, **Christian Medical College, Vellore,** Tamil Nadu, India. Electronic address: aloks@cmcvellore.ac.in Myelodysplastic syndromes (MDS) are a group of clonal hematopoietic disorders related to hematopoietic stem and progenitor cell dysfunction. Several studies have shown the role of the bone marrow microenvironment in regulating hematopoietic stem, and progenitor function and their individual abnormalities have been associated with disease pathogenesis. In this study, we simultaneously evaluated hematopoietic stem cells (HSC), hematopoietic stem progenitor cells (HSPCs) and different stromal elements in a cohort of patients with MDS-refractory cytopenia with multilineage dysplasia (RCMD). Karyotyping of these patients revealed variable chromosomal abnormalities in 73.33% of patients. Long-term HSC and lineage-negative CD34+CD38- cells were reduced while among the HPCs, there was an expansion of common myeloid progenitor and loss of granulocyte-monocyte progenitors. Interestingly, loss of HSCs was accompanied by aberrant frequencies of endothelial (ECs) (CD31+CD45-CD71-) and mesenchymal stem cells (MSCs) (CD31-CD45-71-) and its subsets associated with HSC niche. We further demonstrate down-regulation of HSC maintenance genes such as Cxcl12, VEGF in mesenchymal cells and a parallel upregulation in endothelial cells. Altogether we report for the first time quantitative and qualitative de novo changes in hematopoietic stem and its associated niche in a cohort of MDS-RCMD patients. These findings further reinforce the role of different components of the bone marrow microenvironment in MDS pathogenesis and emphasize the need for comprehensive simultaneous evaluation of all niche elements in such studies.			**N MEDICINE, HEMATOLOGY**	
5.	Abhilash, K. P. P., Patole, S., Jambugulam, M., Sathyendra, S., Mitra, S., Rebekah, G., Yadav, B., Veeraraghavan, B. and Abraham, O. C. Changing trends of infective endocarditis in India: A south Indian experience	**NAT**	**JUL TO DEC**	**GENERAL MEDICINE, BIOSTATISTI**	**NO PMID NO PMCID SCOPUS**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Journal of Cardiovascular Disease Research; 2017, 8 (2): 62-66 **Address:** Department of General Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India Department of Microbiology, **Christian Medical College vellore**, Tamil Nadu, India Department of Medicine, **Christian Medical College vellore**, Tamil Nadu, India Background: Infective endocarditis (IE) is an important cause of morbidity and mortality. The pattern of the disease in terms of the host, agent and the environment appears to be changing globally. Methods: Patients admitted to a tertiary care center in South India between 2005 and 2015 with definite IE, as confirmed by the modified Duke's criteria were included in this retrospective analysis. We analyzed the demographic, microbiological and survival data and compared our results with similar studies done in India over the last 3 decades to assess the changing pattern of IE. Results: 172 patients were diagnosed to have definite IE based on modified Duke's criteria. The mean age of the patients was 41.8 ± 14.2 years, and there was a male predominance (78.4%). Culture positive endocarditis was seen in 83.7 %. Streptococcus species was the predominant etiological agent (44.7%) followed by staphylococcal species (16.8%), enterococcus (9.8%) and gram negative bacteria (9.3%). Native valve endocarditis was seen in 87.8% of patients while prosthetic valve and pacemaker endocarditis was seen in 10.4% and 1.7% respectively. Mitral valve was the most commonly affected valve (52.9%), followed by the aortic valve (23.2%). Multiple valves were involved in 9.3% of patients. Vegetations on the valves were seen in 88.9% of patients. The in-hospital mortality rate was 23.8%. Infection with staphylococcal species, complications of congestive cardiac failure and septic shock were associated with a poor outcome in terms of survival. Conclusion: The disease profile of patients has undergone a change with an increase in mean age and a higher percentage of streptococcal endocarditis. The yield of blood culture has almost doubled over the last three decades. Despite significant advances in medical technology over the last 3 decades, mortality rate remains the same.			**CS, MICROBIOLOGY, MEDICINE**	**Impact Factor:** 0.580 H-Index:17
6.	Abiramalatha, T., Kumar, M., Chandran, S., Sudhakar, Y., Thenmozhi, M. and Thomas, N. Troponin-T as a biomarker in neonates with perinatal asphyxia	**INT**	**JUL TO DEC**	**NEONATOLOGY, BIOCHEMIST**	**PMID:**28854510 **Impact Factor:** 6.124

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	J Neonatal Perinatal Med; 2017, 10 (3): 275-280 **Address:** Department of Neonatology, **Christian Medical College, Vellore,** Tamil Nadu, India; Department of Biochemistry, **Christian Medical College, Vellore,** Tamil Nadu, India; Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India. BACKGROUND: Troponin-T is a commonly used cardiac biomarker, which could be useful in perinatal asphyxia. We aimed to analyze troponin-T concentrations in asphyxiated neonates and to correlate the concentrations with clinical outcomes. METHODS: Data were collected from electronic medical records of neonates diagnosed with perinatal asphyxia over a period of four years. RESULTS: There were 63 neonates with moderate to severe encephalopathy, in whom serial troponin-T concentrations had been done on days 1, 3, and 7. 53 (84%) asphyxiated infants had troponin-T concentration >100 pg/ml at 2-4 h of life.The difference in troponin-T concentrations between moderate and severe encephalopathy was not statistically significant (173 vs. 263 pg/ml, p value 0.40). The difference in the concentrations at 72 hours between cooled and non-cooled neonates was not significant (48.5 vs. 62.5 pg/ml, p value 0.22). Troponin-T concentration was significantly higher in babies with hypotensive shock and hepatic injury, but not acute kidney injury. There was no significant correlation between troponin-T and the extent of resuscitation needed.Troponin-T concentration on day 1 of life was significantly higher in babies who died than who survived (407 vs. 168 pg/ml, p value 0.03). ROC curve for troponin-T to predict mortality had an area under the curve (AUC) of 0.803; the best cut-off value (190 pg/ml) had 82% sensitivity and 80% specificity. CONCLUSION: There was no significant difference in troponin-T concentrations between cooled and non-cooled neonates. Troponin-T concentration had a good predictive accuracy for mortality before discharge.			**RY, BIOSTATISTICS**	H-Index:189
7.	Abiramalatha, Thangaraj, Thomas, Niranjan, Gupta, Vijay, Viswanathan, Anand and Mcguire, William High versus standard volume enteral feeds to promote growth in preterm or low birth weight infants Cochrane Database Syst Rev. 2017 Sep 12;9:CD012413. doi: 10.1002/14651858.CD012413.pub2. **Address:** Neonatology, Sri Ramachandra Medical College and Research Institute,	**INT**	**JUL TO DEC**	**NEONATOLOGY**	**PMID:**CD012413 **WOS:**000411959500036 **Impact Factor:** 6.124 H-Index:189

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Chennai, Tamil Nadu, India. Department of Neonatology, **Christian Medical College, Vellore,** Tamil Nadu, India. Background: Breast milk alone, given at standard recommended volumes (150 to 180 mL/kg/d), is not adequate to meet the protein, energy, and other nutrient requirements of growing preterm or low birth weight infants. One strategy that may be used to address these potential nutrient deficits is to give infants enteral feeds in excess of 200 mL/kg/d ('high-volume' feeds). This approach may increase nutrient uptake and growth rates, but concerns include that high-volume enteral feeds may cause feed intolerance, gastro-oesophageal reflux, aspiration pneumonia, necrotising enterocolitis, or complications related to fluid overload, including patent ductus arteriosus and bronchopulmonary dysplasia. Objectives: To assess the effect on growth and safety of feeding preterm or low birth weight infants with high (> 200 mL/kg/d) versus standard (≤ 200 mL/kg/d) volume of enteral feeds. Infants in intervention and control groups should have received the same type of milk (breast milk, formula, or both), the same fortification or micronutrient supplements, and the same enteral feeding regimen (bolus, continuous) and rate of feed volume advancement. To conduct subgroup analyses based on type of milk (breast milk vs formula), gestational age or birth weight category of included infants (very preterm or VLBW vs preterm or LBW), presence of intrauterine growth restriction (using birth weight relative to the reference population as a surrogate), and income level of the country in which the trial was conducted (low or middle income vs high income) (see 'Subgroup analysis and investigation of heterogeneity'). Search methods: We used the Cochrane Neonatal standard search strategy, which included searches of the Cochrane Central Register of Controlled Trials (CENTRAL; 2017, Issue 2) in the Cochrane Library; MEDLINE (1946 to November 2016); Embase (1974 to November 2016); and the Cumulative Index to Nursing and Allied Health Literature (CINAHL; 1982 to November 2016), as well as conference proceedings, previous reviews, and trial registries. Selection criteria: Randomised and quasi-randomised controlled trials that compared high-volume versus standard-volume enteral feeds for preterm or low birth weight infants. Data collection and analysis: Two review authors assessed trial eligibility and risk of bias and independently extracted data. We analysed treatment effects in individual trials and reported the risk ratio and risk difference for dichotomous data, and the mean difference for continuous data, with respective 95% confidence intervals. . We assessed the quality of evidence at the outcome				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	level via the GRADE approach. Main results: We found one eligible trial that included 64 infants. This trial was not blinded. Analysis showed a higher rate of weight gain in the high-volume feeds group: mean difference 6.20 g/kg/d (95% confidence interval 2.71 to 9.69). There was no increase in the risk of feed intolerance or necrotising enterocolitis with high-volume feeds, but 95% confidence intervals around these estimates were wide. We assessed the quality of evidence for these outcomes as 'low' or 'very low' because of imprecision of the estimates of effect and concern about risk of bias due to lack of blinding in the included trial. Trial authors provided no data on other outcomes, including gastro-oesophageal reflux, aspiration pneumonia, necrotising enterocolitis, patent ductus arteriosus, bronchopulmonary dysplasia, or long-term growth and neurodevelopment. Authors' conclusions: We found only very limited data from one small unblinded trial on the effects of high-volume feeds on important outcomes for preterm or low birth weight infants. The quality of evidence is low to very low. Hence, available evidence is insufficient to support or refute high-volume enteral feeds in preterm or low birth weight infants. A large, pragmatic randomised controlled trial is needed to provide data of sufficient quality and precision to inform policy and practice. DOI: 10.1002/14651858.CD012413.pub2				
8.	Abraham P, Ramamoorthy H et al. Beneficial effects of megadoses of biotin in Streptozotocin-induced gestational diabetes mellitus in rats – A preliminary study. Indian Journal of Physiology and Pharmacology (2017) 61(2) :159-165	**NAT**	**JAN TO JUN**	**ANATOMY**	**Indexed in PubMed Impact Factor:**0.88
9.	Abraham, A. P., Franklyn, J., Chandramohan, J., Gaikwad, P. and Muthusami, J. C. Malignant Peripheral Nerve Sheath Tumour of the Small Bowel Presenting with Intussusception and Perforation: a Double Jeopardy? Indian J Surg Oncol; 2017, 8 (2): 206-209 **Address:** Department of General Surgery, **Christian Medical College, Vellore,** Tamil Nadu India. Department of Pathology, **Christian Medical College, Vellore,** Tamil Nadu India. Malignant peripheral nerve sheath tumours (MPNST) are rare soft tissue sarcomas which largely occur in the extremities and the head and neck region. The tumours are aggressive with a high rate of recurrence. Radical surgical resection remains the treatment of choice with adjuvant radiation therapy and chemotherapy still	**NAT**	**JAN TO JUN**	**GENERAL SURGERY, COLECTRAL SURGERY UNIT II, PATHOLOGY**	**PMID:**28546722 **Impact Factor:** 0.470 H-Index:8

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	failing to demonstrate a clear benefit. The gastrointestinal tract is an exceedingly rare site for these tumours. We report an unusual case of a young male with an MPNST of the small bowel who presented with an ileocolic intussusception and sigmoid perforation.				
10.	Abraham, A. P., Gandham, E. J., Prabhu, K. and Chacko, A. G. Subgaleoatrial shunt: Further progress in the management of iatrogenic cranial pseudomeningoceles Neurol India; 2017, 65 (5): 1178-1180 **Address:** Section of Neurosurgery, Department of Neurological Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JUL TO DEC**	**NEUROSURGERY**	**PMID:**28879933 **Impact Factor:** 1.758 H-Index:39
11.	Advani, S. H., Malhotra, H., Chacko, R. T., Basade, M., Keechilat, P., Mahapatra, P. N., Goswami, C., Sahoo, T. P. and Shah, C. Advanced therapeutic options and importance of rebiopsy in epidermal growth factor receptor-tyrosine kinase inhibitor-progressed nonsmall cell lung carcinoma patients: An expert opinion Indian J Cancer; 2017, 54 (Supplement): S31-S36 **Address:** Director, Medical Oncology, Jaslok hospital and Research centre, Mumbai, Maharashtra, India; Division of Medical Oncology, Birla Cancer Centre, SMS Medical College and Hospital, Jaipur, Rajasthan, India; Department of Medical Oncology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India; Department of Medical Oncology, Amrita Institute of Medical Sciences and Research Center, Kochi, Kerala, India; Department of Medical Oncology, Amrita Institute of Medical Sciences and Research Center, Cochi, Kerala, India; Department of Medical Oncology, Apollo Gleneagles Hospital, Kolkata, West Bengal, India; Chief Coordinator-Oncology Services, Medica Super Specialty Hospital, Kolkata, West Bengal, India; Department of Medicine, Chirayu medical college and Hospital, Bhopal, Madhya Pradesh, India; Department of Oncology and Haematology, Apollo Hospitals International Limited, Ahmedabad, Gujarat, India. Advanced nonsmall cell lung cancer (NSCLC) treatment is primarily based on platinum-based chemotherapy. Although epidermal growth factor receptor (EGFR) targeting has shifted the treatment paradigm toward personalized tyrosine kinase inhibitors (TKIs), resistance develops inevitably and EGFR T790M is the most common acquired resistance mechanism. Rebiopsy of resistant NSCLC cases can	**NAT**	**JUL TO DEC**	**MEDICAL ONCOLOGY**	**PMID:**29292706 **Impact Factor:** 0.497 H-Index:28

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	provide additional information on the underlying resistant mechanisms and therefore can help clinicians in taking better management decisions. An expert panel meeting of renowned cancer oncologists was held to discuss the management of advanced-stage NSCLC. The present paper is based on the recommendations made by the expert panel and is supported by an exhaustive literature search. It was suggested that identification of driver mutation leads to better treatment decisions. TKIs have proven to be better treatment option in EGFR-positive patients as compared to chemotherapy. Third-generation TKIs (osimertinib) promise to bring optimal and improved care for NSCLC cases failing first-line TKI treatment.				
12.	Agarwal, I. and Al-Ghitany, A. Anti-glomerular basement membrane: A rare cause of renal failure in children Saudi J Kidney Dis Transpl; 2017, 28 (2): 379-383 **Address:** Department of Pediatric Nephrology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Internal Medicine, Nephrology Unit, Ain Shams University, Cairo, Egypt. Anti-glomerular basement membrane (GBM) disease is a rare cause of acute renal failure and known to have bad prognosis regarding renal functions recovery and patient survival specially when diagnosed late and presents with severe renal failure that requires dialysis. We report a case of 11-year-old child with acute renal failure secondary to anti-GBM disease and associated with antineutrophil cytoplasmic antibody-positive vasculitis. He was treated with plasmapheresis, steroids, and cyclophosphamide with recovery of his kidney functions.	**INT**	**JAN TO JUN**	**PEDIATRIC NEPHROLOGY**	**PMID:**28352023 **Impact Factor:** 0.740 H-Index:20
13.	Agarwala, M., Salphale, P., Peter, D., Wilson, N. J., Pulimood, S., Schwartz, M. E. and Smith, F. J. D. Keratin 17 Mutations in Four Families from India with Pachyonychia Congenita Indian J Dermatol; 2017, 62 (4): 422-426 **Address:** Department of Dermatology, **Christian Medical College, Vellore,** Tamil Nadu, India; School of Life Sciences, Division of Biological Chemistry and Drug Discovery, Dermatology and Genetic Medicine, University of Dundee, Dundee, UK; Pachyonychia Congenita Project, Salt Lake City, UT, USA.	**NAT**	**JUL TO DEC**	**DERMATOLOGY**	**PMID:**28794556 **PMCID:**5527726 **Impact Factor:** 1.069 H-Index:20

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Pachyonychia congenita (PC) is a rare autosomal dominant genetic skin disorder due to a mutation in any one of the five keratin genes, KRT6A, KRT6B, KRT6C, KRT16, or KRT17. The main features are palmoplantar keratoderma, plantar pain, and nail dystrophy. Cysts of various types, follicular hyperkeratosis, oral leukokeratosis, hyperhidrosis, and natal teeth may also be present. Four unrelated Indian families presented with a clinical diagnosis of PC. This was confirmed by genetic testing; mutations in KRT17 were identified in all affected individuals.				
14.	Agrawal, K., Cherian, K. E., Hephzibah, J. and Thomas, N. An uncommon cause of warm foot BMJ Case Rep; 2017, 2017 **Address:** Department of Endocrinology, **Christian Medical College, Vellore,** India. Department of Nuclear Medicine, **Christian Medical College, Vellore,** India. Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College, Vellore,** India.	**INT**	**JUL TO DEC**	**ENDOCRINOLOGY, NUCLEAR MEDICINE**	**PMID:**28716869 **Impact Factor:** 1.069 H-Index:20
15.	Aithala, R., Alex, A. G. and Danda, D. Pulmonary hypertension in connective tissue diseases: an update Int J Rheum Dis; 2017, 20 (1): 5-24 **Address:** Department ofClinical Immunology & Rheumatology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department ofCardiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Pulmonary hypertension (PH) is a relatively commoner complication of systemic sclerosis (SSc) with estimated prevalence ranging between 8% and 12% as compared to much lower figures in other connective tissue diseases (CTD). It is a major cause of morbidity and mortality in CTDs. PH is classified into five major groups. CTD-associated PH belongs to group 1 PH, also known as pulmonary arterial hypertension (PAH). Around 30% of scleroderma-related deaths are due to PAH. Underlying pathogenesis is related to pulmonary vasculopathy involving small vessels. The Evidence-based Detection of Pulmonary Arterial Hypertension in Systemic sclerosis (DETECT) algorithm outperforms the current European Society of Cardiology/European Respiratory Society guidelines as a screening tool in SSc-	**INT**	**JAN TO JUN**	**RHEUMATOLOGY**	**PMID:**28205373 **Impact Factor:** 2.624 H-Index:27

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	PAH; it can, therefore, suggest when to refer a patient for right heart catheterization. CTD-PAH patients constitute at least 20% of patients included in all major trials of PH-specific therapy and the results are comparable to those of idiopathic PAH. The role of anticoagulation in CTD-PAH is associated with a high risk-benefit ratio with the caveat of its potential role in those with severe disease. There appears to be no role of immunosuppression in scleroderma-PAH; however, immunosuppressive agents, namely the combination of glucocorticoids and pulse cyclophosphamide / possibly mycophenolate, may result in clinical improvement in a subset of patients with systemic lupus erythematosus and mixed connective tissue disease-related PAH.				
16.	Ajay Kumar Mishra, Dr. Use of metformin in chronic kidney disease, congestive heart failure, and chronic liver disease. Curr Med Issues [serial online] 2017 [cited 2018 May 2];15:240-2. Available from: http://www.cmijournal.org/text.asp?2017/15/3/240/212376	**NAT**	**JUL TO DEC**	**MEDICINE UNIT V**	**Not Indexed in PubMed**
17.	Alarcon Falconi, T. M., Kulinkina, A. V., Mohan, V. R., Francis, M. R., Kattula, D., Sarkar, R., Ward, H., Kang, G., Balraj, V. and Naumova, E. N. Quantifying tap-to-household water quality deterioration in urban communities in Vellore, India: The impact of spatial assumptions Int J Hyg Environ Health; 2017, 220 (1): 29-36 **Address:** Department of Civil & Environmental Engineering, Tufts University, Medford, MA, USA. Department of Community Health, **Christian Medical College, Vellore,** Tamil Nadu, India. Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India; Department of Geographic Medicine, Tufts Medical Center, Boston, MA, USA. Department of Civil & Environmental Engineering, Tufts University, Medford, MA, USA; Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India; Friedman School of Nutrition Science & Policy, Tufts University, Boston, MA, USA. Electronic Address**:** elena.naumova@tufts.edu. Municipal water sources in India have been found to be highly contaminated, with further water quality deterioration occurring during household storage. Quantifying water quality deterioration requires knowledge about the exact source tap and	**INT**	**JAN TO JUN**	**COMMUNITY MEDICINE, GASTROINTESTINAL SCIENCES**	**PMID:**27773615 **Impact Factor:** 4.643 H-Index:70

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	length of water storage at the household, which is not usually known. This study presents a methodology to link source and household stored water, and explores the effects of spatial assumptions on the association between tap-to-household water quality deterioration and enteric infections in two semi-urban slums of Vellore, India. To determine a possible water source for each household sample, we paired household and tap samples collected on the same day using three spatial approaches implemented in GIS: minimum Euclidean distance; minimum network distance; and inverse network-distance weighted average. Logistic and Poisson regression models were used to determine associations between water quality deterioration and household-level characteristics, and between diarrheal cases and water quality deterioration. On average, 60% of households had higher fecal coliform concentrations in household samples than at source taps. Only the weighted average approach detected a higher risk of water quality deterioration for households that do not purify water and that have animals in the home (RR=1.50 [1.03, 2.18], p=0.033); and showed that households with water quality deterioration were more likely to report diarrheal cases (OR=3.08 [1.21, 8.18], p=0.02). Studies to assess contamination between source and household are rare due to methodological challenges and high costs associated with collecting paired samples. Our study demonstrated it is possible to derive useful spatial links between samples post hoc; and that the pairing approach affects the conclusions related to associations between enteric infections and water quality deterioration.				
18.	Al-Busafi, S. A., Al-Shuaili, H., Omar, H., Al-Zuhaibi, H., Jeyaseelan, L. and Al-Naamani, K. Epidemiology of Chronic Hepatitis C Infections at a Tertiary Care Centre in Oman Sultan Qaboos Univ Med J; 2017, 17 (4): e404-e410 Address: Department of Medicine, College of Medicine & Health Sciences, Sultan Qaboos University, Muscat, Oman. Internal Medicine Residency Programme, Oman Medical Specialty Board, Muscat, Oman. Department of Medicine, Armed Forces Hospital, Muscat, Oman. Department of Statistics & Health Information, Sultan Qaboos University Hospital, Muscat, Oman. Department of Biostatistics, **Christian Medical College & Hospital, Vellore,** Tamil Nadu, India. Objectives: Chronic hepatitis C (CHC) is a leading cause of liver cirrhosis and hepatocellular carcinoma (HCC) worldwide. However, there is a lack of data regarding the epidemiology of CHC in Oman. This study aimed to describe the clinicopathological characteristics and outcomes of CHC-infected patients at a tertiary care hospital in Oman. Methods: This retrospective descriptive hospital-based study included all CHC-infected patients who presented to the Sultan Qaboos University Hospital (SQUH) in Muscat, Oman, between January 2010 and December 2015. The baseline demographic, clinical, laboratory and	**INT**	**JAN TO JUNE**	**BIOSTATISTICS**	**PMID:29372081** **PMC ID:5766295** **Impact Factor:** NA **H-Index:**NA

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	radiological data of the patients were analysed. Results: A total of 603 CHC-infected patients were identified during the study period; of these, 65.8% were male and the mean age was 44.8 +/- 16.5 years. The main risk factors associated with CHC infection were intravenous drug abuse (23.9%) and a history of blood transfusions (20.7%). The most prevalent virus genotypes were 1 and 3 (44.0% and 35.1%, respectively). Upon initial presentation, 33.0% of the cohort had liver cirrhosis; of these, 48.7% had decompensated cirrhosis and 23.1% had HCCs. Liver transplantation was only performed for 7.5% of the cirrhosis patients, mostly as a curative treatment for HCC. Conclusion: The implementation of national policies to prevent hepatitis C transmission and encourage the early screening of at-risk patients is recommended to reduce the burden and consequences of this disease in Oman.				
19.	Alex, A. G., Lahiri, A., Geevar, T. and George, O. K. Observational study comparing pharmacoinvasive strategy with primary percutaneous coronary intervention in patients presenting with ST elevation myocardial infarction to a tertiary care centre in India J Postgrad Med; 2017, **Address:** Department of Cardiology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Biostatistics, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Transfusion Medicine and Immunohaematology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. OBJECTIVE: The objective was to study whether the incidence of composite end points (mortality, cardiogenic shock and re-myocardial infarction [re-MI]) in pharmacoinvasive strategy was noninferior to primary percutaneous coronary intervention (PCI) in patients with ST-elevation myocardial infarction (STEMI). METHODS: This was an observational study which included 138 patients. The study included patients admitted with a diagnosis of STEMI within 24 h of symptom onset, who underwent primary PCI or pharmacoinvasive therapy in a single center over a 9-month period. Primary end points (death within 30 days, re-MI within 30 days, and cardiogenic shock) and secondary end points (arrhythmias, bleeding manifestations, ischemic stroke, ejection fraction, mechanical complications, and duration of hospital stay) were compared between the two groups at 1 month after intervention. RESULTS: At one month follow-up, the incidence rate for primary end points was 5 events per 43 patients (11.6%) in pharmacoinvasive arm and 18 events per 95 patients (18.9%) in primary PCI arm, a difference of - 7.3% (95% confidence interval: 18.5, 7.1). This finding shows that pharmacoinvasive strategy as compared with primary PCI in the management of STEMI was equivalent in	**NAT**	**JUL TO DEC**	**CARDIOLOGY, BIOSTATISTICS, TRANSFUSION MEDICINE AND IMMUNOHAEMATOLOGY**	**PMID:**29067927 **Impact Factor:** NA H-Index:11

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	terms of composite primary outcome. There was no significant difference between the secondary outcomes between the two groups. Use of thrombus aspiration device and in turn the thrombus burden was significantly lower in the pharmacoinvasive arm. CONCLUSION: This observational study showed that pharmacoinvasive strategy was as good as primary PCI in STEMI, in our setting, where primary PCI may be delayed or not possible at all due to financial and logistic constraints.				
20.	Alexander, T., Mullasari, A. S., Joseph, G., Kannan, K., Veerasekar, G., Victor, S. M., Ayers, C., Thomson, V. S., Subban, V., Gnanaraj, J. P., Narula, J., Kumbhani, D. J. and Nallamothu, B. K. A System of Care for Patients With ST-Segment Elevation Myocardial Infarction in India: The Tamil Nadu-ST-Segment Elevation Myocardial Infarction Program JAMA Cardiol; 2017, 2 (5): 498-505 **Address:** Department of Cardiology, Kovai Medical Center and Hospital, Coimbatore, Tamil Nadu, India. Department of Cardiology, Madras Medical Mission, Chennai, Tamil Nadu, India. Department of Cardiology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Cardiology, Stanley Medical College and Hospital, Chennai, Tamil Nadu, India. Department of Clinical Epidemiology, Kovai Medical Center and Hospital, Coimbatore, Tamil Nadu, India. Department of Internal Medicine, University of Texas Southwestern Medical Center, Dallas. Division of Cardiology, Icahn School of Medicine, Mount Sinai Hospital, New York, New York. Department of Internal Medicine and Michigan Center for Health Analytics and Medical Prediction, University of Michigan, Ann Arbor. Importance: Challenges to improving ST-segment elevation myocardial infarction (STEMI) care are formidable in low- to middle-income countries because of several system-level factors. **OBJECTIVE:** To examine access to reperfusion and percutaneous coronary intervention (PCI) during STEMI using a hub-and-spoke model. Design, Setting, and Participants: This multicenter, prospective, observational study of a quality improvement program studied 2420 patients 20 years or older with symptoms or signs consistent with STEMI at primary care clinics, small hospitals, and PCI hospitals in the southern state of Tamil Nadu in	**INT**	**JAN TO JUN**	**CARDIOLOGY**	**PMID:**28273293 **Impact Factor:** NA H-Index:NA

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	India. Data were collected from the 4 clusters before implementation of the program (preimplementation data). We required a minimum of 12 weeks for the preimplementation data with the period extending from August 7, 2012, through January 5, 2013. The program was then implemented in a sequential manner across the 4 clusters, and data were collected in the same manner (postimplementation data) from June 12, 2013, through June 24, 2014, for a mean 32-week period. Exposures: Creation of an integrated, regional quality improvement program that linked the 35 spoke health care centers to the 4 large PCI hub hospitals and leveraged recent developments in public health insurance schemes, emergency medical services, and health information technology. Main Outcomes and Measures: Primary outcomes focused on the proportion of patients undergoing reperfusion, timely reperfusion, and postfibrinolysis angiography and PCI. Secondary outcomes were in-hospital and 1-year mortality. **RESULTS:** A total of 2420 patients with STEMI (2034 men [84.0%] and 386 women [16.0%]; mean [SD] age, 54.7 [12.2] years) (898 in the preimplementation phase and 1522 in the postimplementation phase) were enrolled, with 1053 patients (43.5%) from the spoke health care centers. Missing data were common for systolic blood pressure (213 [8.8%]), heart rate (223 [9.2%]), and anterior MI location (279 [11.5%]). Overall reperfusion use and times to reperfusion were similar (795 [88.5%] vs 1372 [90.1%]; P = .21). Coronary angiography (314 [35.0%] vs 925 [60.8%]; P < .001) and PCI (265 [29.5%] vs 707 [46.5%]; P < .001) were more commonly performed during the postimplementation phase. In-hospital mortality was not different (52 [5.8%] vs 85 [5.6%]; P = .83), but 1-year mortality was lower in the postimplementation phase (134 [17.6%] vs 179 [14.2%]; P = .04), and this difference remained consistent after multivariable adjustment (adjusted odds ratio, 0.76; 95% CI, 0.58-0.98; P = .04). Conclusions and Relevance: A hub-and-spoke model in South India improved STEMI care through greater use of PCI and may improve 1-year mortality. This model may serve as an example for developing STEMI systems of care in other low- to middle-income countries.				
21.	Aleyamma, T. K., Singhal, Himanshu, Premkumar, Prasanna S., Acharya, Mousumi, Kamath, Mohan S. and George, Korula Local endometrial injury in women with failed IVF undergoing a repeat cycle: A randomized controlled trial Eur J Obstet Gynecol Reprod Biol; 2017, 214 109-114	**INT**	**JAN TO JUN**	**REPRODUCTIVE MEDICINE UNIT, BIOSTATISTICS**	**PMID:**28511086 **WOS:**000404697400018 **Impact Factor:** 1.666 H-Index:83

INT – INTERNATIONAL; NAT – NATIONAL; PMID: PUBMED ID; PMCID: PUBMED CENTRAL ID; WOS – WEB OF SCIENCE ID

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Reproductive Medicine Unit, **Christian Medical College Hospital, Vellore,** India. Department of Biostatistics, **Christian Medical College Hospital, Vellore,** India. Reproductive Medicine Unit, **Christian Medical College Hospital, Vellore,** India. Electronic **Address:** dockamz@gmail.com Reproductive Medicine Unit, Bangalore Baptist Hospital, Bangalore. **OBJECTIVE:** To evaluate the effectiveness of local endometrial injury in women undergoing in vitro fertilization (IVF) with at least one previous unsuccessful attempt. STUDY DESIGN: Randomized controlled trial. Recruited women were randomized into two groups. In group A (pipelle group), women underwent pipelle biopsy twice in the luteal phase in the cycle prior to IVF. In group B (control), women did not undergo any intervention prior to IVF. The primary outcome was clinical pregnancy rate. The secondary outcomes included live birth, miscarriage, multiple pregnancy and preterm delivery rates. **RESULTS:** One hundred and eleven women were included in the study with 55 in the pipelle group and 56 in the control arm. The baseline clinical characteristics were similar in both groups. The clinical pregnancy rates were not significantly different between pipelle and control group (34.09% vs. 27.65%; Odds ratio, OR 1.35, 95% confidence interval, CI 0.55-3.30). The live birth (31.81% vs. 25.53%; OR 1.36, 95% CI 0.55-3.39), multiple pregnancy (33.33% vs. 61.54%; OR 0.31, 95% CI 0.07-1.47), miscarriage (6.66% vs. 7.69%; OR 0.86, 95% CI 0.05-15.23) and preterm delivery rates (35.71% vs. 66.66%; OR 0.28, 95% CI 0.05-1.4) were also not significantly different between the two groups. **CONCLUSION:** Current study did not find any improvement in IVF success rates following endometrial injury in woman undergoing IVF after previous failed attempt. DOI:10.1016/j.ejogrb.2017.05.005				
22.	Amarapurkar, Deepak N., Somani, Vaibhav S., Mukherjee, Partha S., Vishnubhatla, Sreenivas, Das, Kausik, Sood, Ajit, Chawla, Yogesh K., **Eapen, C. E**., Prabhakar, B., Thomas, Varghese, Varshney, Subodh, Hidangmayum, Diamond Sharma, Bhaumik, Pradip, Acharya, Subrat K., Thakur, Bhaskar, Chowdhury, Abhijit, Bombay Hosp Med Res, Ctr, Breach Candy Hosp, Mumbai and All India Inst Med, Sci Proscpective multi-center study of prevalence of autoimmune hepatitis Hepatology; 2017, 66 196A-197A	**INT**	**JUL TO DEC**	**GASTROENTEROLOGY**	**NO PMID** **WOS:**000412089800350 **IMPACTFactor:** 13.246 **H-Index:**306

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
23.	Amirtharaj, G. J., Natarajan, S. K., Pulimood, A., Balasubramanian, K. A., Venkatraman, A. and Ramachandran, A. Role of Oxygen Free Radicals, Nitric Oxide and Mitochondria in Mediating Cardiac Alterations During Liver Cirrhosis Induced by Thioacetamide Cardiovasc Toxicol; 2017, 17 (2): 175-184 **Address:** The Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences, **Christian Medical College,** Ida Scudder Road, Vellore, 632004, India. Center for Stem Cell Research, **Christian Medical College,** Ida Scudder Road, Vellore, 632004, India. The Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences, **Christian Medical College,** Ida Scudder Road, Vellore, 632004, India. wellcome@cmcvellore.ac.in. Thioacetamide (TAA) administration is widely used for induction of liver cirrhosis in rats, where reactive oxygen radicals (ROS) and nitric oxide (NO) participate in development of liver damage. Cardiac dysfunction is an important complication of liver cirrhosis, but the role of ROS or NO in cardiac abnormalities during liver cirrhosis is not well understood. This was investigated in animals after TAA-induced liver cirrhosis and temporal changes in oxidative stress, NO and mitochondrial function in the heart evaluated. TAA induced elevation in cardiac levels of nitrate before development of frank liver cirrhosis, without gross histological alterations. This was accompanied by an early induction of P38 MAP kinase, which is influenced by ROS and plays an important signaling role for induction of iNOS. Increased nitrotyrosine, protein oxidation and lipid peroxidation in the heart and cardiac mitochondria, suggestive of oxidative stress, also preceded frank liver cirrhosis. However, compromised cardiac mitochondrial function with a decrease in respiratory control ratio and increased mitochondrial swelling was seen later, when cirrhosis was evident. In conclusion, TAA induces elevations in ROS and NO in the heart in parallel to early liver damage. This leads to later development of functional deficits in cardiac mitochondria after development of liver cirrhosis.	**INT**	**JAN TO JUN**	**WELLCOME TRUST RESEARCH LABORATORY, CENTRE FOR STEM CELL RESEARCH**	**PMID:**27131982 **IMPACTFactor:**2.712 **H-Index:**44
24.	Anand, Lovkesh, Choudhury, Ashok K., Paulson, Irene, Sharma, Barjesh C., Kumar, Manoj, Bhatia, Vikram, Jindal, Ankur, Jamwal, Kapil D., Maiwall, Rakhi, Shasthry, Saggere M., Khillan, Vikas, Kumar, Guresh, Devarbhavi, Harshad, Tan, Soek Siam, **Eapen, C. E.,** Goel, Ashish, Hu, Jinhua, Amarapurkar, Deepak N., Hamid, Saeed S., Butt, Amna S., Jafri, Syed M., Duan, Zhongping, Chen, Yu, Shah, Samir R., Lee, Guan Huei, Lesmana, Laurentius A., Chawla, Yogesh K., Taneja,	**INT**	**JUL TO DEC**	**GASTROENTEROLOGY**	**NO PMID** **WOS:**000412089800246 **IMPACTFactor:** 13.246 **H-Index:**306

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Sunil, Abbas, Zaigham, Rao, Padaki Nagaraja, Shukla, Akash, Sollano, Jose D., Carpio, Gian, Ghazinyan, Hasmik, Payawal, Diana A., Dokmeci, Abdulkadir, Lau, George, Sarin, Shiv K., Party, Apasl Aclf Working and Party, Apasl Working Prevalence, spectrum, predictors and outcome of infections in patients with Acute on Chronic Liver Failure Hepatology; 2017, 66 139A-139A				
25.	Anandan, S., Devanga Ragupathi, N. K., Muthuirulandi Sethuvel, D. P., Thangamani, S. and Veeraraghavan, B. Prevailing clone (ST69) of Vibrio cholerae O139 in India over 10 years Gut Pathog; 2017, 9 60 **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore,** 632004 India.0000 0004 1767 8969grid.11586.3b Vibrio cholerae is responsible for the cause of severe life-threatening infection known as cholera. The study aimed to analyze the genetic make-up of V. cholerae O139 isolates from India and compare its phylogeny with the global strains. The genome data revealed that all isolates were of same sequence type (ST69) which belongs to seventh pandemic clone, with same virulence gene profile and, antimicrobial resistance gene profile except for two isolates. No known CRISPR repeats were identified in any of these isolates. Three different phages were identified among the isolates. All the isolates were found to harbour intSXT and seventh pandemic-specific gene (VC2346). Results from this study enhance our understanding on the persistence of ST69 V. cholerae O139 over 20 years.	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY**	**PMID:**29142593 **PMCID:**5674738 **WOS:**000414496800001 **IMPACTFactor:** 2.756 **H-Index:**24
26.	Anandan, S., Gopi, R., Devanga Ragupathi, N. K., Muthuirulandi Sethuvel, D. P., Gunasekaran, P., Walia, K. and Veeraraghavan, B. First report of blaOXA-181-mediated carbapenem resistance in Aeromonas caviae in association with pKP3-A: Threat for rapid dissemination J Glob Antimicrob Resist; 2017, 10 310-314 **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore** 632004, Tamil Nadu, India. Division of Epidemiology and Communicable Diseases, Indian Council of Medical Research, New Delhi 110 029, India. Department of Clinical Microbiology, **Christian Medical College, Vellore** 632004, Tamil Nadu, India. Electronic address: vbalaji@cmcvellore.ac.in.	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY**	**PMID:**28743649 **IMPACTFactor:** 3.4 **H-Index:**8

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	OBJECTIVES: Carbapenemase-producing Aeromonas spp. are of great concern in healthcare settings and are also known to acquire clinically relevant resistance genes. In this study, carbapenem-non-susceptible Aeromonas isolates were characterised for their molecular mechanisms of resistance. METHODS: Among 180 Aeromonas isolates, 10 carbapenem-non-susceptible isolates were selected based on their antimicrobial susceptibility profile. Carbapenemase production was investigated by the CarbaNP test. ESBL-, AmpC- and carbapenemase-encoding genes were screened by PCR. Isolates VBF557 and VBF856 with high MICs for imipenem were selected for whole-genome sequencing (WGS). Conjugation experiments were performed to determine the transmissibility of resistance. RESULTS: WGS remarkably revealed the presence of class D beta-lactamases (AmpS/AmpH), class C beta-lactamases and class B2 metallo-beta-lactamase (cphA3) in VBF557. In contrast, VBF856 had multiple resistance genes coding for aminoglycoside, sulphonamide, carbapenem (blaOXA-181 class D beta-lactamase), macrolide, fluoroquinolone, rifampicin, phenicol, tetracycline and trimethoprim resistance. This is the first global report of blaOXA-181 in Aeromonas spp. Interestingly, blaOXA-181 was identified in association with transposon Tn2013 in plasmid pKP3-A. Additionally, an IncQ2 plasmid with qnrS2 was identified. Among the tested isolates, VBF1116 and VBF888 possessed blaNDM and blaVEB, respectively, by PCR. None of the other isolates harboured any tested beta-lactamase genes. The resistance gene was transmissible in the presence of imipenem. CONCLUSIONS: Presence of such resistance genes in plasmids further adds complexity for control of spread of carbapenem resistance. This study reveals the emergence of carbapenem resistance among Aeromonas spp. and the importance of mobile genetic elements such as plasmids in interchanging resistance determinants between species.				
27.	Anandan, S., Muthuirulandi Sethuvel, D. P., Gajendiren, R., Verghese, V. P., Walia, K. and Veeraraghavan, B. Molecular characterization of antimicrobial resistance in clinical Shigella isolates during 2014 and 2015: trends in South India Germs; 2017, 7 (3): 115-122 **Address:** MD, Department of Clinical Microbiology, Asha building, **Christian Medical College,** Ida scudder road, Vellore, 632004, India. MSc, Department of Clinical Microbiology, Asha building, **Christian Medical College,**	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY, CHILD HEALTH**	**PMID:**28932711 **PMCID:**5601094 **IMPACTFactor:**1.170 **H-Index:**6

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Ida scudder road, Vellore, 632004, India. MD, Department of Child Health, ISSCC building, **Christian Medical College,** Ida scudder road, Vellore, 632004, India. PhD, Division of Epidemiology and Communicable Diseases, Indian Council of Medical Research, Ansari Nagar, New Delhi, 110029, India. PhD, Department of Clinical Microbiology, Asha building, **Christian Medical College,** Ida scudder road, Vellore, 632004, India. BACKGROUND: Shigella species are an important cause of acute diarrheal disease worldwide. This study describes the prevalence of Shigella spp. serotypes and their resistance profile in Vellore, South India from 2014 to 2015. METHODS: From 2014 to 2015, 338 Shigella strains were isolated from stool samples at **Christian Medical College, Vellore,** India. Identification and serotyping was carried out using standard protocols. Antimicrobial susceptibility testing was done against commonly used antibiotics. Multidrug resistance was detected in 157 isolates. A subset of 73 isolates was randomly characterized further for acquired antimicrobial resistance genes in this study. RESULTS: The resistance profile of the study isolates varied by species and year. S. sonnei isolates were 100% resistant to all tested antibiotics in 2014, whereas in 2015, resistance was found for AMP-NAL-TAX-SXT-FIX. The resistance phenotypes among S. flexneri isolates for the year 2014 and 2015 were AMP-SXT-NAL-NOR-FIX-TAX and AMP-NAL-SXT-TAX-NOR-FIX respectively. Screening for antimicrobial resistance genes in S. flexneri found dhfr1A, sulII, blaOXA, blaTEM, blaCTX-M-1,qnrB, qnrS and AmpC genes while S. sonnei were found to have only dhfr1A, sulII, blaCTX-M-1 and qnrS genes respectively. Antimicrobial resistance genes were predominantly seen in AMP-SXT-NAL and AMP-SXT-NAL-NOR resistance phenotypes. CONCLUSION: Shigella prevalence of 4.8% to 4.6% was documented between the years 2014 to 2015 in this study. We show evidence that resistance to commonly used antibiotics continues to increase among Shigella spp. in South India. The presence of qnrS and blaCTX-M-15 in the study isolates further indicates the threat of spreading resistance to quinolones and third-generation cephalosporins.				
28.	Angi, M., Kamath, V., Yuvarani, S., Meena, J., Sitaram, U., Manipadam, M. T., Nair, S., Ganapule, A., Fouzia, N. A., Abraham, A., Viswabandya, A., Poonkuzhali, B., George, B., Mathews, V., Srivastava, A. and Srivastava, V. M. The t(8;14)(q24.1;q32) and its variant translocations: A study of 34 cases	**INT**	**JAN TO JUN**	**CYTOGENETICS UNIT, HEMATOLOGY, TRANSFUSIO**	**PMID:**28390216 **IMPACTFactor:**1.160 **H-Index:**13

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Hematol Oncol Stem Cell Ther; 2017, **Address:** Cytogenetics Unit, **Christian Medical College**& Hospital, Vellore, Tamil Nadu 632004, India. Department of Hematology, **Christian Medical College**&Hospital, Vellore, Tamil Nadu, India. Department of Transfusion Medicine and Immunohematology, **Christian Medical College**& Hospital, Vellore, Tamil Nadu, India. Department of Pathology, **Christian Medical College**& Hospital, Vellore, Tamil Nadu, India. Cytogenetics Unit, **Christian Medical College**& Hospital, Vellore, Tamil Nadu 632004, India. Electronic Address**:** cytogen@cmcvellore.ac.in **BACKGROUND:** The t(8;14)(q24.1;q32) and its variants - the t(2;8)(p12;q24.1) and t(8;22)(q24.1;q11.2) are associated with B-cell neoplasia and result in MYC/immunoglobulin (IG) gene rearrangement. PATIENTS AND **METHODS:** We correlated the cytogenetic, molecular and clinico-pathological findings of patients with 8q24 translocations seen in the Department of Haematology, **Christian Medical College, Vellore,** from January 2003 to December 2015. **RESULTS:** There were 34 patients with 8q24 translocations (31, ALL and three myeloma). The t(8;14) was seen in 25 patients, t(8;22) in seven and t(2;8) in two. The salient findings were as follows: 85% males; 79% adults, median age 37 years; L3 morphology in 61%; mature B immunophenotype in 77%; extra-medullary disease in 41%; additional abnormalities in 28 (85%), notably, structural abnormalities of chromosome 1q (41%) and 13q (9%) and monosomy 13 (15%); complex karyotypes in 68%. There were two double-hit lymphoma/leukemia, one with a t(14;18)(q32;q21) and the other with a t(3;14)(q27;q11.2), associated with nodal high grade B cell lymphoma and dermal leukemic infiltrates respectively. Only 13 samples were processed for DNA PCR and all these samples were positive for MYC-IgH (c-gamma type) rearrangement. Only in one patient, in addition to c-gamma, c-alpha rearrangement was also detected. **CONCLUSION:** The frequency (1.7%) and distribution of these translocations in our series and the association with 1q and 13q abnormalities is similar to the literature. Trisomies 7 and 12 were seen in less than 10% of our patients.			**N MEDICINE AND IMMUNOHEMATOLOGY, PATHOLOGY**	
29.	Antonisamy, B., Vasan, S. K., Geethanjali, F. S., Gowri, M., Hepsy, Y. S., Richard, J., Raghupathy, P., Karpe, F., Osmond, C. and Fall, C. H. Weight Gain and Height Growth during Infancy, Childhood, and Adolescence as	**INT**	**JAN TO JUN**	**BIOSTATISTICS, CLINICAL BIOCHEMISTRY, CHILD**	**PMID:**27823768 **IMPACTFactor:** 3.874 **H-Index:**173

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Predictors of Adult Cardiovascular Risk J Pediatr; 2017, 180 53-61 e3 **Address:** Department of Biostatistics, **Christian Medical College, Vellore,** India. Oxford Center for Diabetes, Endocrinology, and Metabolism, University of Oxford, Oxford, United Kingdom. Electronic Address**:** senthil.vasan@ocdem.ox.ac.uk Department of Clinical Biochemistry, **Christian Medical College, Vellore,** India. Department of Child Health, **Christian Medical College, Vellore,** India. Oxford Center for Diabetes, Endocrinology, and Metabolism, University of Oxford, Oxford, United Kingdom; National Institute for Health Research Oxford Biomedical Research Centre, Oxford University Hospital, Oxford, United Kingdom. Medical Research Council Lifecourse Epidemiology Unit, University of Southampton, Southampton, United Kingdom. **OBJECTIVES:** To investigate independent relationships of childhood linear growth (height gain) and relative weight gain to adult cardiovascular disease (CVD) risk traits in Asian Indians. STUDY DESIGN: Data from 2218 adults from the Vellore Birth Cohort were examined for associations of cross-sectional height and body mass index (BMI) and longitudinal growth (independent conditional measures of height and weight gain) in infancy, childhood, adolescence, and adulthood with adult waist circumference (WC), blood pressure (BP), insulin resistance (homeostatic model assessment-insulin resistance [HOMA-IR]), and plasma glucose and lipid concentrations. **RESULTS:** Higher BMI/greater conditional relative weight gain at all ages was associated with higher adult WC, after 3 months with higher adult BP, HOMA-IR, and lipids, and after 15 years with higher glucose concentrations. Taller adult height was associated with higher WC (men beta = 2.32 cm per SD, women beta = 1.63, both P < .001), BP (men beta = 2.10 mm Hg per SD, women beta = 1.21, both P </= .001), and HOMA-IR (men beta = 0.08 log units per SD, women beta = 0.12, both P </= .05) but lower glucose concentrations (women beta = -0.03 log mmol/L per SD P = .003). Greater height or height gain at all earlier ages were associated with higher adult CVD risk traits. These positive associations were attenuated when adjusted for adult BMI and height. Shorter length and lower BMI at birth were associated with higher glucose concentration in women. **CONCLUSIONS:** Greater height or weight gain relative to height during childhood or adolescence was associated with a more adverse adult CVD risk marker profile, and this was mostly attributable to larger adult size.			**HEALTH**	

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
30.	Antony, G., Dasgupta, R., Chacko, G. and Thomas, N. Pituitary tuberculoma with subsequent drug-resistant tuberculous lymphadenopathy: an uncommon presentation of a common disease BMJ Case Rep; 2017, 2017 **Address: Christian Medical College and Hospital** Vellore, Vellore, Tamil Nadu, India. Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College, Vellore,** Tamil Nadu, India. We report a case of pituitary tuberculosis which presented as a non-functioning pituitary macroadenoma, and subsequently developed multidrug-resistant tuberculous lymphadenopathy. Pituitary tuberculosis continues to be a rare presentation of tuberculosis, but incidence and prevalence are expected to grow with increasing numbers of multidrug-resistant tuberculosis. Isolated pituitary tuberculosis is rare. Tuberculosis should be considered in the differential diagnosis in evaluation of a sellar mass.	**INT**	**JAN TO JUN**	**ENDOCRINOLOGY**	**PMID:**28183710 **IMPACT Factor:**NA **H-Index:**11
31.	Arjun Ambat, Andrew Kevin Durai et al Estimation of actual strengths of different brands of commonly available paracetamol tablets in India and comparing them with the corresponding label information Journal of Pharmacy Practice and Research; 2017, 47 (2): 166-167 **Address:** Arjun Ambat, MBBS student Andrew Kevin Durai, MBBS student Saibal Das, PG Registrar (MBBS)Aniket Kumar, Lecturer (MSc)Blessed Winston A, Assistant Professor (MD)Margaret Shanthi FX, Assistant Professor (MD)Department of Pharmacology and ClinicalPharmacology, **Christian Medical College, Vellore,** India E-mail: saibaldas123@gmail.com https://onlinelibrary.wiley.com/doi/epdf/10.1002/jppr.1206	**INT**	**JAN TO JUN**	**DEPARTMENT OF PHARMACOLOGY AND CLINICAL PHARMACOLOGY**	**Indexed in PubMed Impact Factor:**0.58
32.	Arockiaraj, J., Michael, J. S., Amritanand, R., David, K. S. and Krishnan, V. The role of Xpert MTB/RIF assay in the diagnosis of tubercular spondylodiscitis Eur Spine J; 2017, **Address:** Department of Orthopaedics, Spinal Disorders Surgery, **Christian Medical College,** Ida Scudder Road, Vellore, Tamil Nadu, 632004, India.	**INT**	**JAN TO JUN**	**ORTHOPAEDICS, SPINAL DISORDERS SURGERY, CLINICAL MICROBIOLOGY**	**PMID:**28391384 **WOS:**000416413200015 **Impact Factor:** 2.563 **H-Index:**105

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	svjustin.arockiaraj@gmail.com Department of Microbiology, **Christian Medical College,** Ida Scudder Road, Vellore, 632004, India. Department of Orthopaedics, Spinal Disorders Surgery, **Christian Medical College,** Ida Scudder Road, Vellore, Tamil Nadu, 632004, India. **PURPOSE:** This study aims to assess the accuracy of the Xpert MTB/RIF assay in the diagnosis of tubercular spondylodiscitis and to identify its role in detecting Rifampicin resistance in patients with infective spondylodiscitis. **METHODS:** A retrospective study including 348 patients suspected to have infective spondylodiscitis was done. Tissue/pus samples obtained were sent for culture, histopathology and Xpert MTB/RIF assay. All patients who were confirmed to have tubercular spondylodiscitis and those patients who were suspected on clinico-radiological basis were also treated with anti-tuberculous chemotherapy for a period of 9 months. The efficacy of the Xpert MTB/RIF assay was assessed in terms of sensitivity and specificity when compared to culture, histopathology, and Composite reference standard (CRS). **RESULTS:** During this study period of 24 months, a total of 348 patients were treated for infective spondylodiscitis. 254 patients were treated for tuberculosis following a smear positivity, culture positivity, and histopathology report or empirically based on clinico-radiological findings. The sensitivity and specificity of the Xpert MTB/RIF assay when compared to culture were 88.4 and 63.7%, respectively. When compared to both culture and histopathology reports it was 80.9 and 80.6%. The sensitivity and specificity of the Xpert MTB/RIF assay when compared to composite reference standard were 71.2 and 100%, respectively. The sensitivity of the assay to detect Rifampicin resistance was 100%. The prevalence of Rifampicin resistance was 5.1%. **CONCLUSION:** This study recommends Xpert MTB/RIF assay for early detection of Mycobacterium tubercular spondylodiscitis and Rifampicin resistance.				
33.	Arora, R., Abrol, N., Antonisamy, B., Vanitha, S., Chandrasingh, J., Kumar, S., Kekre, N. and Devasia, A. Urine and serum fetuin-A levels in patients with urolithiasis Indian J Urol; 2017, 33 (4): 291-293 **Address:** Department of Urology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Clinical Biochemistry, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JUL TO DEC**	**UROLOGY, BIOSTATISTICS, CLINICAL BIOCHEMISTRY**	**PMID:**29021652 **PMCID:**5635669 **Impact Factor:**5.157 **H-Index:**21

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	INTRODUCTION: Fetuin-A is a glycoprotein secreted by liver and has been shown to inhibit extraosseous mineralization. Urolithiasis may be a manifestation in the urinary tract due to fetuin deficiency in urine. The objective of this study was to compare the 24-h urine and serum fetuin-A levels of patients with and without urolithiasis. METHODS: Serum and 24-h urine fetuin-A levels were measured in 41 patients with bilateral, multiple, or recurrent urinary tract calculi (Group A) and 41 matched controls with no calculi (Group B). Fetuin levels were measured by enzyme linked immunosorbent assay. Serum and urine fetuin-A levels in the two groups were compared. RESULTS: The median (range) 24-h urine fetuin-A value in Group A was 11.9 (1.12-221) mg/day and in Group B was 37.7 (1.28-125) mg/day. This difference was statistically significant (Mann-Whitney test, P = 0.0169). The median (range) serum fetuin-A in Group A was 0.67 (0.05-2.68) g/L and in Group B was 0.99 (0.01-5.5) g/L. The difference between serum values in the two arms was not statistically significant (Mann-Whitney test, P = 0.1817). However, the serum creatinine-adjusted mean log serum fetuin and urine fetuin were significantly different in the two arms (P = 0.003). The mean +/- standard deviation (range) serum creatinine in Group A was 0.98 +/- 0.25 (0.56-1.58) mg% and in Group B was 0.83 +/- 0.16 (0.58-1.18) mg% (two sample t-test, P = 0.0031). CONCLUSIONS: Patients with urolithiasis have lower urine fetuin-A and creatinine-adjusted serum fetuin-A levels.				
34.	Arora, R., George, A. J., Eapen, A. and Devasia, A. Carcinoma prostate masquerading as a hemorrhagic pelvic cyst Int Braz J Urol; 2017, 43 (2): 371-372 **Address:** Department of Urology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Radiology, **Christian Medical College, Vellore,** Tamil Nadu, India.	**INT**	**JAN TO JUN**	**UROLOGY, RADIOLOGY**	**PMID:**27802006 **Impact Factor:** 0.815 **H-Index:**30
35.	Arora, S. and Mathuram, A. J. Osseous sarcoidosis with lupus pernio Indian J Med Res; 2017, 146 (4): 548-549 **Address:** Department of Internal Medicine, Christian Medical College & Hospital, Vellore 632 004, Tamil Nadu, India.	**NAT**	**JUL TO DEC**	**MEDICINE UNIT I**	**PMID:**29434072 **PMC ID**:5819040

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
36.	Arora, Shalabh, Sethi, Maansi and Mishra, Ajay Rhabdomyolysis following hymenoptera envenomation. Curr Med Issues 2017;15:68-9	**NAT**	**JAN TO JUN**	**MEDICINE V**	NOT INDEXED IN PUBMED
37.	Arumugam R, Singh G, Raju K, Mariappan R. Successful management of diastolic heart failure in a patient with restrictive cardiomyopathy following an anterior communicating artery aneurysm clipping. Journal of Neuroanaesthesiology and Critical Care; 2017, 4 (2): 127-128	**NAT**	**JUL TO DEC**	**ANESTHESIA, SURGICAL ICU**	NOT INDEXED IN PUBMED
38.	Arun Kumar Gautham, Ramamani Mariappan, Georgene Singh Lessons learnt in the anaesthetic management of a neonate with giant Occipital meningomyelocele. Accepted for publication Journal of Neuroanaesthesiology and Critical Care; 2017, 4 (2): 127-128	**NAT**	**JAN TO JUN**	**ANAESTHESIA**	NOT INDEXED IN PUBMED
39.	Arun, A. K., Senthamizhselvi, A., Mani, S., Vinodhini, K., Janet, N. B., Lakshmi, K. M., Abraham, A., George, B., Srivastava, A., Srivastava, V. M., Mathews, V. and Balasubramanian, P. Frequency of rare BCR-ABL1 fusion transcripts in chronic myeloid leukemia patients Int J Lab Hematol; 2017, 39 (3): 235-242 **Address:** Department of Haematology, **Christian Medical College, Vellore,** India. Cytogenetics Unit, **Christian Medical College, Vellore,** India. **INTRODUCTION:** The hallmark of chronic myeloid leukemia (CML) is the presence of Philadelphia chromosome, its resultant fusion transcript (BCR-ABL1), and fusion protein (p210). Alternate breakpoints in BCR (m-bcr, mu-bcr, and others) or ABL1 result in the expression of few rare fusion transcripts (e19a2, e1a2, e13a3, e14a3) and fusion proteins (p190, p200, p225) whose exact clinical significance remains to be determined. **METHODS:** Our study was designed to determine the type and frequency of BCR-ABL1 fusion transcripts in 1260 CML patients and to analyze the prognosis and treatment response in patients harboring rare BCR-ABL1 fusion transcripts. **RESULTS:** The frequency of various BCR-ABL1 fusion transcripts was as follows: e14a2 (60%), e13a2 (34.3%), e1a2 (1.2%), e1a2 + e13a2 (2.0%), e1a2 + e14a2 (1.8%), e19a2 (0.3%), and e14a3 (0.3%). CML patients with e1a2 transcripts had higher rates of disease progression, resistance, or suboptimal response to imatinib and failed to achieve major molecular response.	**INT**	**JAN TO JUN**	**HAEMATOLOGY, CYTOGENETICS UNIT**	**PMID:**28035733 **Impact Factor:** 2.030 **H-Index:**45

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	CONCLUSION: Characterization of the specific fusion transcript in CML patients is important owing to the difference in prognosis and response to therapy in addition to the conventional need for monitoring treatment response. CML patients with e1a2 transcripts have to be closely monitored due to the high incidence of disease progression and treatment resistance/failure.				
40.	Aruna G.1, E. Angel B.2, Johnson S. L.3, Arun R.4, Manoranjitham S.5 A case report on nursing management of burns injury in a chronic mentally ill in a psychiatric hospital TNNMC Journal of Mental Health Nursing. 2017;5(2):41-43 Online published on 12 October, 2017 **Address:** 1Junior Lecturer, Psychiatric Nursing, College of Nursing 2Staff Nurse B.Sc, Psychiatric Nursing, College of Nursing, 3Reader, Psychiatric Nursing, College of Nursing, 4Assistant Professor, Department of Psychiatry, College of Nursing, **CMC, Vellore**. 5Professor and Head of Psychiatric Nursing, College of Nursing, **CMC, Vellore**.	**NAT**	**JUL TO DEC**	**PSYCHIATRY**	NOT INDEXED IN PUBMED
41.	Aruna Kekre, Vaibhav Londhe Association of metabolic syndrome and lower urinary tract symptoms amongst south Indian postmenopausal women Int J Reprod Contracept Obstet Gynecol. 2017 Oct;6(10):4393-4398 DOI: http://dx.doi.org/10.18203/2320-1770.ijrcog20174411	**INT**	**JUL TO DEC**	**OG II**	**Index Copernicus**
42.	Ashish, G., Augustine, A. M., Tyagi, A. K., Lepcha, A. and Balraj, A. Subjective Visual Vertical and Horizontal in Vestibular Migraine J Int Adv Otol; 2017, 13 (2): 254-258 **Address:** Department of Ear Nose and Throat, Vellore Ear Nose and Throat Center, Patna, India. anjalilepcha@yahoo.com. OBJECTIVE: To assess the functional status of the otolithic pathway in vestibular migraine by comparing the results of static and dynamic subjective visual vertical and horizontal [subjective visual vertical (SVV) and subjective visual horizontal (SVH)] testing in patients with vestibular migraine with that of normal individuals. MATERIALS AND METHODS: This hospital-based prospective study was conducted in 82 normal adults and 66 adults with vestibular migraine. The SVV and SVH angles were measured under static and dynamic conditions using a software-based test protocol. The arithmetic mean of six readings in each situation was considered.	**INT**	**JUL TO DEC**	**EAR NOSE AND THROAT**	**PMID:**28816696 **Impact Factor:** 0.392 **H-Index:**6

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	The results were further analyzed by stratifying cases and controls into two age groups 20-40 years and 41-60 years and into gender. RESULTS: The clinical profile of the patients with vestibular migraine was comparable to the available literature. The dynamic SVV and SVH in both age groups and the static SVH in the 41-60 years age group were significantly higher compared to normal individuals ($p<0.05$). The dynamic SVV and SVH were significantly higher in the cases compared to controls among both males and females ($p<0.05$). CONCLUSION: There is evidence of otolithic pathway abnormalities in individuals with vestibular migraine. The inclusion of SVV and SVH testing for the evaluation of patients with vestibular migraine may be useful in the interpretation and rehabilitation of symptoms in these patients.				
43.	Athiyarath R, Chapla A, Thomas N, et al Molecular Diagnosis of Wilson's Disease Using Next Generation Sequencing Platform. Journal of Clinical and Experimental Hepatology : 2017 Jul ; 7(S2) S88–S89	**NAT**	**JUL TO DEC**	**ENDOCRINOLOGY**	**Indexed in PubMed Impact Factor:**0.38
44.	Aureen D'Cunha, Susan Jehangir, Grace Rebekah, Jujju Jacob Kurian, Tarun John Jacob, Reju Joseph Thomas, John Mathai, Immanuel Sampath Karl Outcome and renal function following salvage surgery for bilateral Wilms tumor: a single-institution experience. Annals of Pediatric Surgery 2017, 13:145–149	**INT**	**JUL TO DEC**	**PAEDIATRIC SURGERY**	**Indexed In Scopus**
45.	Aureen, D. Cunha and Jehangir, S. Gastrocolic fistula in a child following corrosive acid ingestion BMJ Case Rep; 2017, 2017 **Address:** Paediatric Surgery, **Christian Medical College and Hospital** Vellore, Vellore, India. Gastrocolic fistulas in children are most commonly seen after placement of a percutaneous endoscopic gastrostomy. We present a 14-year-old girl who developed a gastrocolic fistula following accidental corrosive acid ingestion. On evaluation of her symptoms, a barium swallow identified the gastrocolic fistula. It healed spontaneously in 3 months. This was both unexpected and remarkable. To the best of our knowledge this is the first case of a gastrocolic fistula occurring following corrosive ingestion.	**INT**	**JAN TO JUN**	**PAEDITRIC SURGERY**	**PMID:**28433969 **Impact Factor:**NA **H-Index:**11
46.	Avinash Bhat Balekuduru, Amit Kumar Dutta, Sanjeev Kumar Nagaruru, Shamim	**INT**	**JUL TO**	**GASTROENTE**	**Indexed in**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Sheik, Suneetha Parandhamaiah Kurella, Satyaprakash Bonthala Subbaraj Comparison of diagnostic yield of endoscopic ultrasound-guided fine-needle aspiration cytology and cell block in solid lesions J Dig Endosc 2017;8:176-81.		**DEC**	**ROLOGY**	**Index Copernicus**
47.	Babji, S., Arumugam, R., Priyahemavathy, R., Sriraman, A., Sarvanabhavan, A., Manickavasagam, P., Simon, A., Aggarwal, I., Moses, P. D., Arora, R. and Kang, G. Genotype distribution of Group A rotavirus from southern India, 2005-2016 Vaccine; 2017, **Address:** Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India. Electronic address: sudhirbabji@cmcvellore.ac.in. Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India. Department of Child Health, **Christian Medical College, Vellore,** India. Epidemiology and Communicable Diseases Division, Indian Council of Medical Research, New Delhi, India. Diarrheal disease due to Group A rotaviruses remain a leading cause of mortality and morbidity in the less developed parts of the world. India has started a phased roll out of rotavirus vaccine in the national immunization program. This analysis summarizes the rotavirus genotype strain distribution pre-vaccine introduction in Vellore, India from December 2005 to June 2016. Rotavirus was responsible for 32% of all diarrheal admission to the hospital. G2P[4] was the predominant strain in the initial years and was gradually replaced by G1P[8]. The emergence of G9P[4] replacing G9P[8], and the detection of G12 strains over several years were documented. There was no clear seasonality of disease. These data form the baseline to monitor genotype distribution post-vaccine introduction in Tamil Nadu.	**INT**	**JUL TO DEC**	**WELLCOME TRUST RESEARCH LABORATORY, CHILD HEALTH**	**PMID:**28844408 **Impact Factor:** 3.235 **H-Index:**151
48.	Babu, N. M. S., Srinath, S. C., Lahiri, A., Chase, D., John, B. and Roshan, J. Three-dimensional echocardiography with left ventricular strain analyses helps earlier prediction of right ventricular pacing-induced cardiomyopathy Journal of the Saudi Heart Association; 2017, https://doi.org/10.1016/j.jsha.2017.06.001 **Address:** Department of Cardiology, **Christian Medical College, Vellore** 632004, IndiaaIndia Background and objectives: Right ventricular (RV) pacing can lead to progressive ventricular dysfunction over a certain period. This pacemaker-induced cardiomyopathy (PiCMP) may be more common than previously reported. Speckle	**INT**	**JUL TO DEC**	**CARDIOLOGY**	**NO PMID** **NO PMCID** **SCOPUS** **Impact Factor:**0.370 **H-Index:**8

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	tracking imaging is a recent development in echocardiography that can identify left ventricular (LV) dysfunction even before the LV ejection fraction (LVEF) value decreases. Three-dimensional (3D) echocardiography has made more accurate assessment of LVEF possible. The objectives of this study are to study the incidence of RV PiCMP using 3D echocardiography and LV strain analysis over a follow-up of 6. months, and to identify its predictors. Methods: This is an observational study of consecutive patients without structural heart disease and with a baseline EF of more than 45% who received a permanent pacemaker. They were observed over a 6-month period. PiCMP was defined as a decrease in LVEF by 10 percentage points or a decrease in LV strain by 15% from baseline in the absence of other known causes of cardiomyopathy. PiCMP incidence and its associations were analyzed over a 6-month period. Results: The incidence of PiCMP was not only significant over a period of 6. months but also at 24. hours. Significant drops in 3D EF were noted in one (2.8%) patient at 24. hours and in another four (11.1%) patients at 6. months. A significant decrease in LV global longitudinal strain was noted in 23 (63.9%) patients by 6. months. In seven of these patients, there was significant decrease in global longitudinal strain 24. hours after implantation. In analyzing longitudinal strain, the parameter significantly influencing a decrease was a pacing percentage of ≥20% (p = 0.023). Conclusions: PiCMP is not uncommon in patients undergoing pacemaker implantation and is associated with RV pacing. PiCMP was associated with a ventricular pacing percentage of ≥20%. 3D echocardiography with LV strain analysis plays a vital role in identifying LV dysfunction at an earlier stage compared to EF. PiCMP, if picked up and intervened upon early, can help impede its progression. © 2017 King Saud University.				
49.	Bakthavatchalam YD(1), Sudarsanam TD(2), Babu P(1), Munuswamy E(1), Muthuirulandi Sethuvel DP(1), Devanga Ragupathi NK(1), Veeraraghavan B(1). Methicillin-Susceptible Teicoplanin-Resistant Staphylococcus haemolyticus Isolate from a Bloodstream Infection with Novel Mutations in the tcaRAB Teicoplanin Resistance Operon. Jpn J Infect Dis. 2017 Jul 24;70(4):458-460. doi: 10.7883/yoken.JJID.2016.482. Epub 2017 Feb 28. **Author information:** (1)Department of Clinical Microbiology, **Christian Medical College**.	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY, MEDICINE UNIT II**	**PMID:**28250264 **WOS:**000407307300020 **Impact Factor:** 1.273 **H-Index:**45

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	(2)Department of Medicine (Unit II), **Christian Medical College**. Staphylococcus haemolyticus is a coagulase-negative staphylococcus that is frequently isolated from blood cultures. Here, we report a case of methicillin-susceptible S. haemolyticus that is resistant to teicoplanin (TEC) and heteroresistant to vancomycin (VAN). The isolate was susceptible to cefoxitin and resistant to TEC by Etest. Population analysis profile-area under the curve analysis confirmed the presence of a VAN heteroresistant subpopulation. Next-generation sequencing analysis of the genome revealed the presence of blaZ and msr(A), which encode cross-resistance to macrolide, lincosamide, and streptogram in B, and the quinolone resistance-conferring gene norA. In addition, several amino acid substitutions were observed in the TEC resistance operon tcaRAB, including I3N, I390N, and L450I in tcaA and L44V, G52V, and S87P in tcaR, as well as in the transpeptidase encoding gene walK (D336Y, R375L, and V404A) and L315 and P316 in graS. We hypothesized that this combination of mutations could confer TEC resistance and reduced VAN susceptibility. DOI: 10.7883/yoken.JJID.2016.482				
50.	Bakthavatchalam, Y. D. and Veeraraghavan, B. Challenges, Issues and Warnings from CLSI and EUCAST Working Group on Polymyxin Susceptibility Testing J Clin Diagn Res; 2017, 11 (8): DL03-DL04 **Address:** Research Associate, Department of Clinical Microbiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Professor and Head, Department of Clinical Microbiology, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY**	**PMID:**28969129 **PMCID:**5620769 **Impact Factor:**0.650 **H-Index:**18
51.	Bakthavatchalam, Y. D., D, T. K., Tayubi, I. A., S, B. A., Babu, P., Munusamy, E., Thukkaram, B., Ravi, R., Doss, C. Gp and Veeraraghavan, B. In vitro efficacy and in-silico analysis of cefixime-ofloxacin combination for Salmonella Typhi from bloodstream infection Journal of Applied Microbiology; 2017, 123 (3): 615-624 **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore,** 632004, India. Department of Integrative Biology, School of Biosciences and Technology, VIT University, Vellore, Tamil Nadu, India.	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY**	**PMID:**28650129 **Impact Factor:** 2.099 **H-Index:**126

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Faculty of Computing and Information Technology, King Abdulaziz University, Rabigh, 21911, Saudi Arabia. **AIMS:** Recently, the cefixime-ofloxacin combination is approved by drug controller general of India (DCGI) to treat typhoid fever. We sought to evaluate the antimicrobial activity of cefixime-ofloxacin combination against S. Typhi. METHODS AND **RESULTS:** 283 non-duplicate S. Typhi isolates collected during 2012 to 2014 were included in this study. Minimum inhibitory concentration (MIC) of cefixime and ofloxacin was determined by using broth microdilution method. Combinational testing was performed by using checkerboard assay. In checkerboard assay, synergistic activity was seen in 11% of isolates, while the majority of the isolate showed indifference and none of them showed antagonism. An in silico strategy, an alternative to the animal model, was carried out to understand drug interaction and toxicity. Molecular docking results elucidated that cefixime and ofloxacin are capable of inhibiting the cell wall synthesis and DNA replication respectively. Computational ADMET analysis showed no toxicity and no drug-drug interaction between cefixime and ofloxacin. **CONCLUSION:** Cefixime-ofloxacin combination could be effective against moderately susceptible fluoroquinolone S. Typhi but not fluoroquinolone-resistant isolates. SIGNIFICANCE AND IMPACT OF STUDY: Cefixime-ofloxacin combination with no drug-drug interaction and non-toxic predicted through computational analysis didn't show antagonism against S. Typhi in in-vitro. Though the present study showed no adverse effects with the cefixime-ofloxacin combination, further studies on pharmacokinetic and pharmacodynamic (PK-PD) parameters of cefixime and ofloxacin combination are warranted. This article is protected by copyright. All rights reserved.				
52.	Bakthavatchalam, Y. D., Nabarro, L. E. and Veeraraghavan, B. Evolving Rapid Methicillin-resistant Staphylococcus aureus Detection: Cover All the Bases J Glob Infect Dis; 2017, 9 (1): 18-22 **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Clinical Microbiology, **Christian Medical College, Vellore,** Tamil Nadu, India; Department of Infectious Disease, Public Health England, London, UK.	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY**	**PMID:**28250621 **Impact Factor:**1.19 **H-Index:**16

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	The dissemination of methicillin-resistant (MR) Staphylococcus aureus (SA) in community and health-care settings is of great concern and associated with high mortality and morbidity. Rapid detection of MRSA with short turnaround time can minimize the time to initiate appropriate therapy and further promote infection control. Early detection of MRSA directly from clinical samples is complicated by the frequent association of MRSA with methicillin-susceptible SA (MSSA) and coagulase-negative Staphylococcus (CoNS) species. Infection associated with true MRSA or MSSA is differentiated from CoNS, requires target specific primers for the presence of SA and mec A or nuc or fem A gene for confirmation of MR. Recently, livestock-associated MRSA carrying mec C variant complicates the epidemiology of MRSA further. Several commercial rapid molecular kits are available with a different combination of these targets for the detection of MRSA or MSSA. The claimed sensitivity and specificity of the currently available commercial kits is varying, because of the different target combination used for detection of SA and MR.				
53.	Bakthavatchalam, Y. D., Nabarro, L. E. B., Ralph, R. and Veeraraghavan, B. Diagnosis and management of Panton-Valentine leukocidin toxin associated Staphylococcus aureus infection: an update Virulence; 2017, 0 **Address:** a Department of Clinical Microbiology, **Christian Medical College** , Vellore - 632004 , India. b Department of Medicine (unit II) , **Christian Medical College** , Vellore - 632004 , India. The incidence of invasive Staphylococcus aureus (SA) infection has increased in the past decade and is associated with poor outcomes and high mortality rates. Of all the virulence factors, Panton-Valentine Leukocidin (PVL) has received the greatest attention. PVL producing SA strains are more likely to produce severe skin and soft tissue infections (SSTIs) and necrotizing pneumonia. This review focuses on the current evidence on PVL-SA virulence, epidemiology, clinical disease and treatment with relevance to healthcare in India.	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY, MEDICINE UNIT II**	**PMID:**28783418 **Impact Factor:** 4.665 **H-Index:**39
54.	Bakthavatchalam, Y. D., Pragasam, A. K., Biswas, I. and Veeraraghavan, B. Polymyxin susceptibility testing, interpretative breakpoints and resistance mechanism: an update	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY**	**PMID:**28962863 **Impact Factor:** 1.276

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	J Glob Antimicrob Resist; 2017, **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore** - 632004, India. Department of Microbiology, Molecular Genetics and Immunology, University of Kansas Medical Center, Kansas City, Kansas, USA. Department of Clinical Microbiology, **Christian Medical College, Vellore** - 632004, India. Electronic address: vbalaji@cmcvellore.ac.in. Emerging multi-drug resistant (MDR) nosocomial pathogens is a great threat. Polymyxin, an old cationic polypeptide, is considered as the last resort drug in treating infections associated with MDR Gram-negative bacteria. Increased use of polymyxins in treating critical patient necessitates, routine testing of polymyxins. However, susceptibility testing of both colistin and polymyxin B are challenging. Currently, available susceptibility testing methods are briefly discussed in this review. The multicomponent composition of colistin and polymyxin B influences significantly the susceptibility testing. In addition, issues with polymyxin susceptibility testing includes, poor diffusion into the agar medium, adsorption to microtiter plates and synergistic effect of P-80 with polymyxin has a greater impact on the performance of susceptibility testing. This review will be describing the recently identified chromosomal and plasmid-mediated polymyxin resistance mechanism. This includes modification of lipopolysaccharide (LPS) with L-Ara-4-N and PEtN, resulting in the alternation of negative charge and plasmid-mediated colistin resistant determinant mcr-1, mcr-1.2, mcr-2, and mcr-3.				**H-Index:**8
55.	Bakthavatchalam, Y. D., Veeraraghavan, B., Devanga Ragupathi, N. K., Babu, P., Munuswamy, E. and David, T. Draft genome sequence of reduced teicoplanin-susceptible and vancomycin-heteroresistant methicillin-resistant Staphylococcus aureus from sepsis cases J Glob Antimicrob Resist; 2017, 8 169-171 **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore** 632004, Tamil Nadu, India.Department of Clinical Microbiology, **Christian Medical College, Vellore** 632004, Tamil Nadu, India. Electronic Address**:** vbalaji@cmcvellore.ac.in Department of Medicine (Unit II), **Christian Medical College, Vellore** 632004, India.	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY, MEDICINE UNIT II**	**PMID:**28216019 **Impact Factor:** 1.276 **H-Index:**8

INT – INTERNATIONAL; NAT – NATIONAL; PMID: PUBMED ID; PMCID: PUBMED CENTRAL ID; WOS – WEB OF SCIENCE ID

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Here we report the whole-genome shotgun sequence of six methicillin-resistant Staphylococcus aureus (MRSA) showing reduced susceptibility to both vancomycin and teicoplanin. The typical Indian community-acquired MRSA (CA-MRSA) clone ST772-MRSA-V-t657 was the most common genotype (3/6; 50%), followed by ST672-MRSA-IV (2/6; 33%) and ST22-MRSA-IV (1/6; 17%). All strains harboured a mutation in the tcaRAB operon, vraSR, graSR and/or rpoB genes, which are frequently mutated determinants in a heteroresistant vancomycin-intermediate S. aureus (hVISA) phenotype.				
56.	Bal, H. S., Sen, S., Sam, C., Chacko, J., Mathai, J. and Regunandan, S. R. Urogenital Management in Cloaca: An Alternative Approach J Indian Assoc Pediatr Surg; 2017, 22 (2): 108-113 **Address:** Department of Pediatric Surgery, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Pediatric Surgery, PSG IMS and R Centre, Coimbatore, Tamil Nadu, India. Department of Pediatric Surgery, Coimbatore Medical College Hospital, Coimbatore, Tamil Nadu, India. **INTRODUCTION:** In the management of cloaca, there is concern that dissection of the urogenital sinus in early childhood with the aim of total anatomical correction is hazardous. Avoiding such mobilization and providing mitrofanoff channel, when needed, till peripubertal period reduces complications and is technically easier. **MATERIALS AND METHODS:** Forty-three cases of cloaca were managed in the period 2004-2016. Case records and radiology were reviewed retrospectively. The follow-up evaluation was done by looking into voiding history, bowel movements, and menstruation history. **RESULTS:** There were three groups of children, namely, those with no reconstruction done elsewhere except a diverting fecal stoma (Group I, n = 25), those who had undergone anorectal correction elsewhere with no attempt at urogenital reconstruction (Group IIA, n = 13), and those with attempted bowel and genitourinary reconstruction elsewhere (Group IIB, n = 5). The Group I children (one still awaiting reconstruction) underwent early rectal reconstruction followed by expectant management of the urogenital apparatus. The 18 referred cases had multiple problems, chiefly urogenital, of congenital or iatrogenic origin. While urinary reconstruction included	**NAT**	**JAN TO JUN**	**PEDIATRIC SURGERY**	**PMID:**28413306 **Impact Factor:**0.590 **H-Index:**11

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	bladder augmentation, ileal neobladder, bladder neck closure, and ureteric reimplantation, the foundation of urinary management was intermittent catheterization through mitrofanoff stoma and the avoidance of any dissection of the cloacal common channel. Surgery on the genital tracts included drainage of hydrocolpos, perineal surgery for low vaginae and abdominoperineal vaginoplasty for high vaginae in the peripubertal period with or without bowel supplementation. Spontaneous voiding was maintained in 17 of 25 (68%) Group I girls (including one death later from intestinal complications), 7 of 13 (54%), Group IIA girls, and 1 of 5 (20%) Group IIB girls. Painless menstruation was noted in eight postpubertal girls, three through the cloacal channel (awaiting reconstruction) and five through the reconstructed vagina. Most of the children are on a bowel management program for fecal cleanliness with washouts through the neoanus or Malone's stoma. **CONCLUSION:** We report a nonconventional approach to cloaca based on avoiding dissection of or around the common channel for urethrovaginal reconstruction, opting for mitrofanoff stoma for intermittent catheterization, when needed, and late vaginal reconstruction. We believe this approach has reduced the overall need for intermittent catheterization.				
57.	Bal, S. K., Gupta, R., Irodi, A., Nair, A., Mathew, J., Thangakunam, B. and Christopher, D. J. To immunosuppress or not: Behcet's syndrome presenting as an eosinophilic pleural effusion Lung India; 2017, 34 (5): 457-460 **Address:** Department of Pulmonary Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Radiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Rheumatology, **Christian Medical College, Vellore,** Tamil Nadu, India. Etiologic diagnosis of an eosinophilic pleural effusion (EPE) presents a diagnostic challenge when intrapleural air and blood have been ruled out as its proximate causes. Among the causes of EPE, those that require immunosuppression for the underlying disease include connective tissue diseases, sarcoidosis, vasculitis, and eosinophilic pneumonia. We present a case of clinically suspected Behcet's syndrome based on a 10-year history of recurrent multiple oral ulcers and human leukocyte antigen-B51 positivity who presented with only an EPE. Computed tomography pulmonary angiogram ruled out central thoracic vein thrombosis but	**NAT**	**JUL TO DEC**	**PULMONARY MEDICINE, RADIOLOGY, RHEUMATOLOGY**	**PMID:**28869232 **PMCID:**5592759 **Impact Factor:**0.530 **H-Index:**14

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	was inconclusive in ruling out a subsegmental pulmonary embolism. The patient declined immunosuppressants and while on follow-up developed bilateral extensive acute lower limb deep venous thrombosis and pulmonary embolism. Upper infrarenal inferior vena cava demonstrated chronic thrombosis suggestive of its antecedent role in pulmonary embolism-related EPE during the first instance. Behcet's syndrome-related EPE can be associated with venous thromboembolism, and immunosuppressive therapy prevents the subsequent thrombotic episodes.				
58.	Balakumar, B., Gangadharan, S., Ponmudi, N., Kumar, S., Prakash, J. J. and Palocaren, T. Atypical osteomyelitis and concurrent septic arthritis due to Salmonella in immunocompetent children J Clin Orthop Trauma; 2017, 8 (3): 293-297 **Address:** Paediatric Orthopaedic Unit, **Christian Medical College, Vellore,** 632004, India. Dept of Child Health, **Christian Medical College, Vellore,** 632004, India. Dept of Microbiology, **Christian Medical College, Vellore,** 632004, India. Paediatric Orthopaedic Unit, **Christian Medical College,** Ida scudder Road, Vellore, 632004, India. OBJECTIVE: Salmonella osteomyelitis in immunocompromised individuals with sickle cell anaemia is well documented. Its occurrence in immunocompetent children is rare. METHODS: All pus culture positive cases of salmonella typhi between the period 2009 to 2014 were reviewed and only those children without sickle cell disease or trait were considered further. RESULTS: Eighty five patients had positive cultures. Of these only three children had culture positive Salmonella septic arthritis in the absence of sickle cell disease. Two children had shoulder septic arthritis while one had hip septic arthritis. CONCLUSION: Our case series highlights the possibility of salmonella typhi osteomyelitis in immunocompetent individuals. Clinicians should be aware of this presentation which is usually delayed due to the atypical organism and lack of clinical response in the initial stages, as disastrous sequelae of septic arthritis may result if prompt treatment is not initiated in time.	**INT**	**JUL TO DEC**	**PAEDIATRIC ORTHOPAEDIC UNIT, CHILD HEALTH, ORTHOPAEDIC UNIT**	**PMID:**28951650 **PMCID:**5605736 **Impact Factor:**0.330 **H-Index:**6
59.	Balakumar, B., Jasper, A., Livingstone, R. S., Gangadharan, S., Gibikote, S. and Madhuri, V.	**INT**	**JUL TO DEC**	**PEDIATRIC ORTHOPEDIC**	**PMID:**29657637 **PMCID:**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Can Pixel Value Ratio be Used in the Assessment of Ceramic Bone Substitute Incorporation? Observations from a Pilot Study Pol J Radiol. 2017 Nov 17; 82:706-712. doi: 10.12659/PJR.903022. eCollection 2017. **Address:** Pediatric Orthopedic Unit, **Christian Medical College, Vellore,** India Department of Radiodiagnosis, **Christian Medical College, Vellore,** India BACKGROUND: Assessment of bone graft substitute incorporation is critical in the clinical decision making process and requires special investigations. We examined if the pixel value ratio (PVR) obtained in routine follow-up digital radiographs could be used for such assessment. MATERIAL/METHODS: Radiographic images were acquired using either computed radiography or flat panel digital radiography systems. The PVR from radiographs of thirty children with ceramic bone substitute grafting were analyzed using the software from the picture archival and communication system (PACS) workstation. Graft incorporation was also assessed using the van Hemert scale. Three independent observers (A, B, C) measured PVRs at two different time points during the first and the last follow-up visits. PVR was compared with the van Hemert scale scores and analyzed using Spearman's rank correlation. RESULTS: The mean intra-observer reliability was 0.8996, and inter-observer reliabilities were 0.69 (A vs. C), 0.78 (A vs. B), and 0.85 (B vs. C) for the first follow-up visit and 0.74 (A vs. C), 0.82 (A vs. B), and 0.70 (B vs. C) for the last follow-up measurements. Spearman's correlation showed a strong negative association between PVR values and van Hemert scale scores, as the healing process advanced on serial measurements at each follow-up ($r=-0.94$, $n=60$, $z=-7.24$, $p\leq0.0001$). The reliability of the PVR measurements was assessed using an aluminum step wedge and ceramic graft. CONCLUSIONS: PVR is potentially a reliable indicator of bone graft incorporation and can aid in clinical decision making provided standard radiographic techniques are used.			**S UNIT, RADIOLOGY,**	**PMC**5894053
60.	Baldia, M., Sharma, S. A., Prabhu, K. and Koshy, S. Cost effective, technically simpler, and aesthetically promising cranioplasty in developing countries Neurol India. 2017 May-Jun;65(3):660-663. doi: 10.4103/neuroindia.NI_210_16. **Address:** Department of Neurosurgery, **Christian Medical College and Hospital,**	**NAT**	**JAN TO JUN**	**NEUROSURGERY, DENTAL SURGERY**	**PMID:**28488649 **Impact Factor:** 1.758 **H-Index:**39

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Vellore, Tamil Nadu, India. Department of Dental Surgery, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. DOI: 10.4103/neuroindia.NI_210_16				
61.	Barber, Ryan M., Fullman, Nancy, Sorensen, Reed J. D., Bollyky, Thomas, Mckee, Martin, Nolte, Ellen, Abajobir, Amanuel Alemu, Abate, Kalkidan Hassen, Abbafati, Cristiana, Abbas, Kaja M., Abd-Allah, Foad, Abdulle, Abdishakur M., Abdurahman, Ahmed Abdulahi, Abera, Semaw Ferede, Abraham, Biju, Abreha, Girmatsion Fisseha, Adane, Kelemework, Adelekan, Ademola Lukman, Adetifa, Ifedayo Morayo O., Afshin, Ashkan, Agarwal, Arnav, Agarwal, Sanjay Kumar, Agarwal, Sunilkumar, Agrawal, Anurag, Kiadaliri, Aliasghar Ahmad, Ahmadi, Alireza, Ahmed, Kedir Yimam, Ahmed, Muktar Beshir, Akinyemi, Rufus Olusola, Akinyemiju, Tomi F., Akseer, Nadia, Al-Aly, Ziyad, Alam, Khurshid, Alam, Noore, Alam, Sayed Saidul, Alemu, Zewdie Aderaw, Alene, Kefyalew Addis, Alexander, Lily, Ali, Raghib, Ali, Syed Danish, Alizadeh-Navaei, Reza, Alkerwi, Ala'a, Alla, Francois, Allebeck, Peter, Allen, Christine, Al-Raddadi, Rajaa, Alsharif, Ubai, Altirkawi, Khalid A., Martin, Elena Alvarez, Alvis-Guzman, Nelson, Amare, Azmeraw T., Amini, Erfan, Ammar, Walid, Amo-Adjei, Joshu, Amoako, Yaw Ampem, Anderson, Benjamin O., Androudi, Sofia, Ansari, Hossein, Ansha, Mustafa Geleto, Antonio, Carl Abelardo T., Aernloev, Johan, Artaman, Al, Asayesh, Hamid, Assadi, Reza, Astatkie, Ayalew, Atey, Tesfay Mehari, Atique, Suleman, Atnafu, Niguse Tadele, Atre, Sachin R., Avila-Burgos, Leticia, Avokpaho, Euripide Frinel G. Arthur, Quintanilla, Beatriz Paulina Ayala, Awasthi, Ashish, Ayele, Nebiyu Negussu, Azzopardi, Peter, Saleem, Huda Omer Ba, Baernighausen, Till, Bacha, Umar, Badawi, Alaa, Banerjee, Amitava, Barac, Aleksandra, Barboza, Miguel A., Barker-Collo, Suzanne L., Barrero, Lope H., Basu, Sanjay, Baune, Bernhard T., Baye, Kaleab, Bayou, Yibeltal Tebekaw, Bazargan-Hejazi, Shahrzad, Bedi, Neeraj, Beghi, Ettore, Bejot, Yannick, Bello, Aminu K., Bennett, Derrick A., Bensenor, Isabela M., Berhane, Adugnaw, Bernabe, Eduardo, Bernal, Oscar Alberto, Beyene, Addisu Shunu, Beyene, Tariku Jibat, Bhutta, Zulfiqar A., Biadgilign, Sibhatu, Bikbov, Boris, Birlik, Sait Mentes, Birungi, Charles, Biryukov, Stan, Bisanzio, Donal, Bizuayehu, Habtamu Mellie, Bose, Dipan, Brainin, Michael, Brauer, Michael, Brazinova, Alexandra, Breitborde, Nicholas J. K., Brenner, Hermann, Butt, Zahid A., Cardenas, Rosario, Cahuana-Hurtado, Lucero, Campos-Nonato, Ismael Ricardo, Car, Josip, Carrero, Juan Jesus, Casey, Daniel, Caso, Valeria, Castaneda-Orjuela, Carlos A., Rivas, Jacqueline Castillo, Catala-Lopez, Ferran, Cecilio, Pedro, Cercy, Kelly, Charlson, Fiona J., Chen, Alan Z., Chew, Adrienne, Chibalabala, Mirriam, Chibueze, Chioma Ezinne, Chisumpa, Vesper	**INT**	**JUL TO DEC**	**PULMONARY MEDICINE**	**PMID: 28528753** **PMCID: PMC5528124** **WOS:**000405477900026 **Impact Factor:** 47.831 **H-Index:**646

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Hichilombwe, Chitheer, Abdulaal A., Chowdhury, Rajiv, Christensen, Hanne, **Christopher, Devasahayam Jesudas,** Ciobanu, Liliana G., Cirillo, Massimo, Coggeshall, Megan S., Cooper, Leslie Trumbull, Cortinovis, Monica, Crump, John A., Dalal, Koustuv, Dandona, Lalit, Dandona, Rakhi, Dargan, Paul I., Das Neves, Jose, Davey, Gail, Davitoiu, Dragos V., Davletov, Kairat, De Leo, Diego, Del Gobbo, Liana C., Del Pozo-Cruz, Borja, Dellavalle, Robert P., Deribe, Kebede, Deribew, Amare, Jarlais, Don C. Des, Dey, Subhojit, Dharmaratne, Samath D., Dicker, Daniel, Ding, Eric L., Dokova, Klara, Dorsey, E. Ray, Doyle, Kerrie E., Dubey, Manisha, Ehrenkranz, Rebecca, Ellingsen, Christian Lycke, Elyazar, Iqbal, Enayati, Ahmadali, Ermakov, Sergey Petrovich, Eshrati, Babak, Esteghamati, Alireza, Estep, Kara, Fuerst, Thomas, Faghmous, Imad D. A., Fanuel, Fanuel Belayneh Bekele, Faraon, Emerito Jose Aquino, Farid, Talha A., Farinha, Carla Sofia E Sa, Faro, Andre, Farvid, Maryam S., Farzadfar, Farshad, Feigin, Valery L., Feigl, Andrea B., Fereshtehnejad, Seyed-Mohammad, Fernandes, Jefferson G., Fernandes, Joao C., Feyissa, Tesfaye Regassa, Fischer, Florian, Fitzmaurice, Christina, Fleming, Thomas D., Foigt, Nataliya, Foreman, Kyle J., Forouzanfar, Mohammad H., Franklin, Richard C., Frostad, Joseph, Hiwot, Tsegaye Tewelde G., Gakidou, Emmanuela, Gambashidze, Ketevan, Gamkrelidze, Amiran, Gao, Wayne, Garcia-Basteiro, Alberto L., Gebre, Teshome, Gebremedhin, Amanuel Tesfay, Gebremichael, Mengistu Welday, Gebru, Alemseged Aregay, Gelaye, Amha Admasie, Geleijnse, Johanna M., Genova-Maleras, Ricard, Gibney, Katherine B., Giref, Ababi Zergaw, Gishu, Melkamu Dedefo, Giussani, Giorgia, Godwin, William W., Gold, Audra, Goldberg, Ellen M., Gona, Philimon N., Goodridge, Amador, Gopalani, Sameer Vali, Goto, Atsushi, Graetz, Nicholas, Greaves, Felix, Griswold, Max, Guban, Peter Imre, Gugnani, Harish Chander, Gupta, Prakash C., Gupta, Rahul, Gupta, Rajeev, Gupta, Tanush, Gupta, Vipin, Habtewold, Tesfa Dejenie, Hafezi-Nejad, Nima, Haile, Demewoz, Hailu, Alemayehu Desalegne, Hailu, Gessessew Bugssa, Hakuzimana, Alex, Hamadeh, Randah Ribhi, Hambisa, Mitiku Teshome, Hamidi, Samer, Hammami, Mouhanad, Hankey, Graeme J., Hao, Yuantao, Harb, Hilda L., Hareri, Habtamu Abera, Haro, Josep Maria, Hassanvand, Mohammad Sadegh, Havmoeller, Rasmus, Hay, Roderick J., Hay, Simon I., Hendrie, Delia, Heredia-Pi, Ileana Beatriz, Hoek, Hans W., Horino, Masako, Horita, Nobuyuki, Hosgood, H. Dean, Htet, Aung Soe, Hu, Guoqing, Huang, Hsiang, Huang, John J., Huntley, Bethany M., Huynh, Chantal, Iburg, Kim Moesgaard, Ileanu, Bogdan Vasile, Innos, Kaire, Irenso, Asnake Ararsa, Jahanmehr, Nader, Jakovljevic, Mihajlo B., James, Peter, James, Spencer Lewis, Javanbakht, Mehdi, Jayaraman, Sudha P., Jayatilleke, Achala Upendra, Jeemon, Panniyammakal, Jha, Vivekanand, John, Denny, Johnson,				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Catherine, Johnson, Sarah C., Jonas, Jost B., Juel, Knud, Kabir, Zubair, Kalkonde, Yogeshwar, Kamal, Ritul, Kan, Haidong, Karch, Andre, Karema, Corine Kakizi, Karimi, Seyed M., Kasaeian, Amir, Kassebaum, Nicholas J., Kastor, Anshul, Katikireddi, Srinivasa Vittal, Kazanjan, Konstantin, Keiyoro, Peter Njenga, Kemmer, Laura, Kemp, Andrew Haddon, Kengne, Andre Pascal, Kerbo, Amene Abebe, Kereselidze, Maia, Kesavachandran, Chandrasekharan Nair, Khader, Yousef Saleh, Khalil, Ibrahim, Khan, Abdur Rahman, Khan, Ejaz Ahmad, Khan, Gulfaraz, Khang, Young-Ho, Khoja, Abdullah Tawfih Abdullah, Khonelidze, Irma, Khubchandani, Jagdish, Kibret, Getiye Dejenu, Kim, Daniel, Kim, Pauline, Kim, Yun Jin, Kimokoti, Ruth W., Kinfu, Yohannes, Kissoon, Niranjan, Kivipelto, Miia, Kokubo, Yoshihiro, Kolk, Anneli, Kolte, Dhaval, Kopec, Jacek A., Kosen, Soewarta, Koul, Parvaiz A., Koyanagi, Ai, Kravchenko, Michael, Krishnaswami, Sanjay, Krohn, Kristopher J., Defo, Barthelemy Kuate, Bicer, Burcu Kucuk, Kuipers, Ernst J., Kulkarni, Veena S., Kumar, G. Anil, Kumsa, Fekede Asefa, Kutz, Michael, Kyu, Hmwe H., Lager, Anton Carl Jonas, Lal, Aparna, Lal, Dharmesh Kumar, Lalloo, Ratilal, Lallukka, Tea, Lan, Qing, Langan, Sinead M., Lansingh, Van C., Larson, Heidi J., Larsson, Anders, Laryea, Dennis Odai, Latif, Asma Abdul, Lawrynowicz, Alicia Elena Beatriz, Leasher, Janet L., Leigh, James, Leinsalu, Mall, Leshargie, Cheru Tesema, Leung, Janni, Leung, Ricky, Levi, Miriam, Liang, Xiaofeng, Lim, Stephen S., Lind, Margaret, Linn, Shai, Lipshultz, Steven E., Liu, Patrick, Liu, Yang, Lo, Loon-Tzian, Logroscino, Giancarlo, Lopez, Alan D., Lorch, Scott A., Lotufo, Paulo A., Lozano, Rafael, Lunevicius, Raimundas, Lyons, Ronan A., Macarayan, Erlyn Rachelle King, Mackay, Mark T., El Razek, Hassan Magdy Abd, El Razek, Mohammed Magdy Abd, Mahdavi, Mahdi, Majeed, Azeem, Malekzadeh, Reza, Malta, Deborah Carvalho, Mantovani, Lorenzo G., Manyazewal, Tsegahun, Mapoma, Chabila C., Marcenes, Wagner, Marks, Guy B., Marquez, Neal, Martinez-Raga, Jose, Marzan, Melvin Barrientos, Massano, Joao, Mathur, Manu Raj, Maulik, Pallab K., Mazidi, Mohsen, Mcalinden, Colm, Mcgrath, John J., Mcnellan, Claire, Meaney, Peter A., Mehari, Alem, Mehndiratta, Man Mohan, Meier, Toni, Mekonnen, Alemayehu B., Meles, Kidanu Gebremariam, Memish, Ziad A., Mengesha, Melkamu Merid, Mengiste, Desalegn Tadese, Mengistie, Mubarek Abera, Menota, Bereket Gebremichael, Mensah, George A., Mereta, Seid Tiku, Meretoja, Atte, Meretoja, Tuomo J., Mezgebe, Haftay Berhane, Micha, Renata, Millear, Anoushka, Mills, Edward J., Minnig, Shawn, Mirarefin, Mojde, Mirrakhimov, Erkin M., Mock, Charles N., Mohammad, Karzan Abdulmuhsin, Mohammed, Shafiu, Mohanty, Sanjay K., Mokdad, Ali H., Mola, Glen Liddell D., Molokhia, Mariam, Monasta, Lorenzo, Montico, Marcella, Moradi-Lakeh, Maziar, Moraga, Paula, Morawska, Lidia, Mori, Rintaro, Moses, Mark, Mueller, Ulrich				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	O., Murthy, Srinivas, Musa, Kamarul Imran, Nachega, Jean B., Nagata, Chie, Nagel, Gabriele, Naghavi, Mohsen, Naheed, Aliya, Naldi, Luigi, Nangia, Vinay, Nascimento, Bruno Ramos, Negoi, Ionut, Neupane, Sudan Prasad, Newton, Charles R., Ng, Marie, Ngalesoni, Frida Namnyak, Ngunjiri, Josephine Wanjiku, Nguyen, Grant, Ningrum, Dina Nur Anggraini, Nolte, Sandra, Nomura, Marika, Norheim, Ole F., Norrving, Bo, Noubiap, Jean Jacques N., Obermeyer, Carla Makhlouf, Ogbo, Felix Akpojene, Oh, In-Hwan, Okoro, Anselm, Oladimeji, Olanrewaju, Olagunju, Andrew Toyin, Olivares, Pedro R., Olsen, Helen E., Olusanya, Bolajoko Olubukunola, Olusanya, Jacob Olusegun, Opio, John Nelson, Oren, Eyal, Ortiz, Alberto, Osborne, Richard H., Osman, Majdi, Owolabi, Mayowa O., Mahesh, P. A., Pain, Amanda W., Pakhale, Smita, Castillo, Elizabeth Palomares, Pana, Adrian, Papachristou, Christina, Parsaeian, Mahboubeh, Patel, Tejas, Patton, George C., Paudel, Deepak, Paul, Vinod K., Pearce, Neil, Pereira, David M., Perez-Padilla, Rogelio, Perez-Ruiz, Fernando, Perico, Norberto, Pesudovs, Konrad, Petzold, Max, Phillips, Michael Robert, Pigott, David M., Pillay, Julian David, Pinho, Christine, Polinder, Suzanne, Pond, Constance D., Prakash, V., Purwar, Manorama, Qorbani, Mostafa, Quistberg, D. Alex, Radfar, Amir, Rafay, Anwar, Rahimi, Kazem, Rahimi-Movaghar, Vafa, Rahman, Mahfuzar, Rahman, Mohammad Hifz Ur, Rai, Rajesh Kumar, Ram, Usha, Rana, Saleem M., Rankin, Zane, Rao, Paturi Vishnupriya, Rao, Puja C., Rawaf, Salman, Rego, Maria Albertina Santiago, Reitsma, Marissa, Remuzzi, Giuseppe, Renzaho, Andre M. N. N., Resnikoff, Serge, Rezaei, Satar, Rezai, Mohammad Sadegh, Ribeiro, Antonio L., Roba, Hirbo Shore, Rokni, Mohammad Bagher, Ronfani, Luca, Roshandel, Gholamreza, Roth, Gregory A., Rothenbacher, Dietrich, Roy, Nawal K., Sachdev, Perminder S., Sackey, Ben Benasco, Saeedi, Mohammad Yahya, Safiri, Saeid, Sagar, Rajesh, Sahraian, Mohammad Ali, Saleh, Muhammad Muhammad, Salomon, Joshua A., Samy, Abdallah M., Sanabria, Juan Ramon, Sanchez-Nino, Maria Dolores, Sandar, Logan, Santos, Itamar S., Santos, Joao Vasco, Milicevic, Milena M. Santric, Sarmiento-Suarez, Rodrigo, Sartorius, Benn, Satpathy, Maheswar, Savic, Miloje, Sawhney, Monika, Saylan, Mete I., Schoettker, Ben, Schutte, Aletta E., Schwebel, David C., Seedat, Soraya, Seid, Abdulbasit Musa, Seifu, Canaan Negash, Sepanlou, Sadaf G., Serdar, Berrin, Servan-Mori, Edson E., Setegn, Tesfaye, Shackelford, Katya Anne, Shaheen, Amira, Shahraz, Saeid, Shaikh, Masood Ali, Shakh-Nazarova, Marina, Shamsipour, Mansour, Islam, Sheikh Mohammed Shariful, Sharma, Jayendra, Sharma, Rajesh, She, Jun, Sheikhbahaei, Sara, Shen, Jiabin, Shi, Peilin, Shigematsu, Mika, Shin, Min-Jeong, Shiri, Rahman, Shoman, Haitham, Shrime, Mark G., Sibamo, Ephrem Lejore Sibamo, Sigfusdottir, Inga Dora, Silva, Diego				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Augusto Santos, Silveira, Dayane Gabriele Alves, Sindi, Shireen, Singh, Abhishek, Singh, Jasvinder A., Singh, Om Prakash, Singh, Prashant Kumar, Singh, Virendra, Sinke, Abiy Hiruye, Sinshaw, Aklilu Endalamaw, Skirbekk, Vegard, Sliwa, Karen, Smith, Alison, Sobngwi, Eugene, Soneji, Samir, Soriano, Joan B., Sousa, Tatiane Cristina Moraes, Sposato, Luciano A., Sreeramareddy, Chandrashekhar T., Stathopoulou, Vasiliki, Steel, Nicholas, Steiner, Caitlyn, Steinke, Sabine, Stokes, Mark Andrew, Stranges, Saverio, Strong, Mark, Stroumpoulis, Konstantinos, Sturua, Lela, Sufiyan, Muawiyyah Babale, Suliankatchi, Rizwan Abdulkader, Sun, Jiandong, Sur, Patrick, Swaminathan, Soumya, Sykes, Bryan L., Tabares-Seisdedos, Rafael, Tabb, Karen M., Taffere, Getachew Redae, Talongwa, Roberto Tchio, Tarajia, Musharaf, Tavakkoli, Mohammad, Taveira, Nuno, Teeple, Stephanie, Tegegne, Teketo Kassaw, Tehrani-Banihashemi, Arash, Tekelab, Tesfalidet, Tekle, Dejen Yemane, Shifa, Girma Temam, Terkawi, Abdullah Sulieman, Tesema, Azeb Gebresilassie, Thakur, J. S., Thomson, Alan J., Tillmann, Taavi, Tiruye, Tenaw Yimer, Tobe-Gai, Ruoyan, Tonelli, Marcello, Topor-Madry, Roman, Tortajada, Miguel, Troeger, Christopher, Truelsen, Thomas, Tura, Abera Kenay, Uchendu, Uche S., Ukwaja, Kingsley N., Undurraga, Eduardo A., Uneke, Chigozie Jesse, Uthman, Olalekan A., Van Boven, Job F. M., Van Dingenen, Rita, Varughese, Santosh, Vasankari, Tommi, Venketasubramanian, Narayanaswamy, Violante, Francesco S., Vladimirov, Sergey K., Vlassov, Vasiliy Victorovich, Vollset, Stein Emil, Vos, Theo, Wagner, Joseph A., Wakayo, Tolassa, Waller, Stephen G., Walson, Judd L., Wang, Haidong, Wang, Yuan-Pang, Watkins, David A., Weiderpass, Elisabete, Weintraub, Robert G., Wen, Chi-Pang, Werdecker, Andrea, Wesana, Joshua, Westerman, Ronny, Whiteford, Harvey A., Wilkinson, James D., Wiysonge, Charles Shey, Woldeyes, Belete Getahun, Wolfe, Charles D. A., Won, Sungho, Workicho, Abdulhalik, Workie, Shimelash Bitew, Wubshet, Mamo, Xavier, Denis, Xu, Gelin, Yadav, Ajit Kumar, Yaghoubi, Mohsen, Yakob, Bereket, Yan, Lijing L., Yano, Yuichiro, Yaseri, Mehdi, Yimam, Hassen Hamid, Yip, Paul, Yonemoto, Naohiro, Yoon, Seok-Jun, Younis, Mustafa Z., Yu, Chuanhua, Zaidi, Zoubida, Zaki, Maysaa El Sayed, Zambrana-Torrelio, Carlos, Zapata, Tomas, Zenebe, Zerihun Menlkalew, Zodpey, Sanjay, Zoeckler, Leo, Zuhlke, Liesl Joanna, Murray, Christopher J. L. and Quality, G. B. D. Healthcare Access Healthcare Access and Quality Index based on mortality from causes amenable to personal health care in 195 countries and territories, 1990-2015: a novel analysis from the Global Burden of Disease Study 2015 Lancet; 2017, 390 (10091): 231-266				

INT – INTERNATIONAL; NAT – NATIONAL; PMID: PUBMED ID; PMCID: PUBMED CENTRAL ID; WOS – WEB OF SCIENCE ID

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Background National levels of personal health-care access and quality can be approximated by measuring mortality rates from causes that should not be fatal in the presence of effective medical care (ie, amenable mortality). Previous analyses of mortality amenable to health care only focused on high-income countries and faced several methodological challenges. In the present analysis, we use the highly standardised cause of death and risk factor estimates generated through the Global Burden of Diseases, Injuries, and Risk Factors Study (GBD) to improve and expand the quantification of personal health-care access and quality for 195 countries and territories from 1990 to 2015. Methods We mapped the most widely used list of causes amenable to personal health care developed by Nolte and McKee to 32 GBD causes. We accounted for variations in cause of death certification and misclassifications through the extensive data standardisation processes and redistribution algorithms developed for GBD. To isolate the effects of personal health-care access and quality, we risk-standardised cause-specific mortality rates for each geography-year by removing the joint effects of local environmental and behavioural risks, and adding back the global levels of risk exposure as estimated for GBD 2015. We employed principal component analysis to create a single, interpretable summary measure-the Healthcare Quality and Access (HAQ) Index-on a scale of 0 to 100. The HAQ Index showed strong convergence validity as compared with other health-system indicators, including health expenditure per capita (r= 0.88), an index of 11 universal health coverage interventions (r= 0.83), and human resources for health per 1000 (r= 0.77). We used free disposal hull analysis with bootstrapping to produce a frontier based on the relationship between the HAQ Index and the Socio-demographic Index (SDI), a measure of overall development consisting of income per capita, average years of education, and total fertility rates. This frontier allowed us to better quantify the maximum levels of personal health-care access and quality achieved across the development spectrum, and pinpoint geographies where gaps between observed and potential levels have narrowed or widened over time. Findings Between 1990 and 2015, nearly all countries and territories saw their HAQ Index values improve; nonetheless, the difference between the highest and lowest observed HAQ Index was larger in 2015 than in 1990, ranging from 28.6 to 94.6. Of 195 geographies, 167 had statistically significant increases in HAQ Index levels since 1990, with South Korea, Turkey, Peru, China, and the Maldives recording among the largest gains by 2015. Performance on the HAQ Index and individual causes showed distinct patterns by region and level of development, yet substantial				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	heterogeneities emerged for several causes, including cancers in highest-SDI countries; chronic kidney disease, diabetes, diarrhoeal diseases, and lower respiratory infections among middle-SDI countries; and measles and tetanus among lowest-SDI countries. While the global HAQ Index average rose from 40.7 (95% uncertainty interval, 39.0-42.8) in 1990 to 53.7 (52.2-55.4) in 2015, far less progress occurred in narrowing the gap between observed HAQ Index values and maximum levels achieved; at the global level, the difference between the observed and frontier HAQ Index only decreased from 21.2 in 1990 to 20.1 in 2015. If every country and territory had achieved the highest observed HAQ Index by their corresponding level of SDI, the global average would have been 73.8 in 2015. Several countries, particularly in eastern and western sub-Saharan Africa, reached HAQ Index values similar to or beyond their development levels, whereas others, namely in southern sub-Saharan Africa, the Middle East, and south Asia, lagged behind what geographies of similar development attained between 1990 and 2015. Interpretation This novel extension of the GBD Study shows the untapped potential for personal health-care access and quality improvement across the development spectrum. Amid substantive advances in personal health care at the national level, heterogeneous patterns for individual causes in given countries or territories suggest that few places have consistently achieved optimal health-care access and quality across health-system functions and therapeutic areas. This is especially evident in middle-SDI countries, many of which have recently undergone or are currently experiencing epidemiological transitions. The HAQ Index, if paired with other measures of health-systemcharacteristics such as intervention coverage, could provide a robust avenue for tracking progress on universal health coverage and identifying local priorities for strengthening personal health-care quality and access throughout the world. Copyright (C) The Author(s). Published by Elsevier Ltd. DOI: 10.1016/S0140-6736(17)30818-8				
62.	Barnwal, P., Das, S., Mondal, S., Ramasamy, A., Maiti, T. and Saha, A. Probuphine(R) (buprenorphine implant): a promising candidate in opioid dependence Ther Adv Psychopharmacol; 2017, 7 (3): 119-134 **Address:** Jamia Hamdard (Hamdard University) - Department of Medical Elementology and Toxicology, Faculty of Science, New Delhi, India. Department of	**INT**	**JAN TO JUN**	**CLINICAL PHARMACOLOGY, PSYCHIATRY**	**PMID:**28348732 **Impact Factor:**2.130 **H-Index:**NA

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Pharmacology and Clinical Pharmacology, **Christian Medical College, Vellore** 632002, India. Department of Clinical and Experimental Pharmacology - Calcutta School of Tropical Medicine, Kolkata, India. Swamy Vivekanandha College of Pharmacy - Department of Pharmacology, Namakkal, India. **Christian Medical College** - Department of Psychiatry, Vellore, India. **Christian Medical College** - Student (MBBS), Vellore, India. Opioid dependence leads to physical dependence and addiction which finally results in profound medical, psychological and social dysfunction. One of the useful medications for opioid dependence is buprenorphine, the partial opioid agonist, which is used alone or in combination with naloxone. However, buprenorphine is the victim of its own success due to its illicit use and accidental poisoning in children. Also, buprenorphine typically requires daily self-administration and its effectiveness heavily depends on patient adherence. So, poor treatment adherence results in ineffective treatment manifesting as craving and withdrawal symptoms. Short-term use of buprenorphine in opioid dependence is also often followed by relapse. Buprenorphine when used sublingually often results in inadequate or fluctuating blood concentrations and poorer treatment retention compared with methadone. All of these led to the development of Probuphine(R), a polymeric matrix composed of ethylene vinyl acetate and buprenorphine in the form of implants, that are implanted subdermally in office practice and deliver the active drug over 6 months. Buprenorphine release from such implant is fairly consistent, avoiding plasma peaks and troughs, and the implant is also reported to be safe. In this review article, we have highlighted these aspects of treatment of opioid addiction, stressing on the pharmacology of buprenorphine and Probuphine(R), and relevant clinical trials addressing the efficacy and safety of Probuphine(R). This sustained-release implantable formulation of buprenorphine has the potential to be a suitable alternative to daily or alternate day sublingual buprenorphine which can thereby eliminate the need for daily supervision, minimizing fluctuations in plasma concentrations, and allowing these patients to reduce clinic or pharmacy visits.				
63.	Basetty, S., Mishra, A. K. and Sathyendra, S. Neurological effects of an unusual insecticide poison: Amitraz J Family Med Prim Care; 2017, 6 (3): 686-687 Address: Department of Family Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Internal Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Amitraz is a triazapentadiene compound belonging to amidine family. As an insecticide and acaricide, it has been used to control red spider mites, scale insects, aphids, leaf worms,	**NAT**	**JAN TO JUNE**	**FAMILY MEDICINE, INTERNAL MEDICINE**	**PMID:29417037** **PMC ID:5787984** **Impact Factor:**0.670 **H-Index:**NA

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	whitefly, bollworms, and pear psylla on Oregon pear crops. Poisoning is secondary to accidental or suicidal inhalation and ingestion of the compound. The toxicity profile is mostly in the form of alteration of the nervous system resulting in various clinical manifestations. We describe a case report of amitraz poisoning presenting with coma.				
64.	Basetty, S., Yeshvanth Kumar, G. S., Shalini, M., Angeline, R. P., David, K. V. and Abraham, S. Management of diabetic ketosis and ketoacidosis with intramuscular regular insulin in a low-resource family medicine setting J Family Med Prim Care; 2017, 6 (1): 25-28 **Address:** Department of Family Medicine, Low Cost Effective Care Unit, **Christian Medical College, Vellore,** Tamil Nadu, India. Community Health and Development, **Christian Medical College, Vellore,** Tamil Nadu, India. BACKGROUND: India is facing an epidemic of diabetes mellitus (DM). Effective management of complications of DM is a challenge in resource-poor areas of India. This study addresses the need to explore low-cost methods to manage diabetic ketosis (DK) and diabetic ketoacidosis (DKA). OBJECTIVES: To demonstrate the use of intramuscular (IM) regular insulin as a safe alternative method to control DK and DKA in a family practice setting. MATERIALS AND METHODS: A retrospective chart review was done for 34 patients admitted with DK and DKA in a family medicine unit for the urban poor over 5 years. Data on age, sex, precipitating factors, blood pressure, number of days of hospitalization, amount of insulin, and time required to control blood glucose (BG) and to correct acidosis were entered into EpiData version 3.1 and analyzed using SPSS software version 17. RESULTS: Administration of IM regular insulin was effective in reducing the BG to < 250 mg/dL in patients with DK and DKA. The mean time required for this in the ketosis group was 3.8 h and in the ketoacidosis group was 3.9 h. The mean amount of insulin required for correction of acidosis in the ketoacidosis group was 72.3 units and the mean time to achieve this was 33 h. Of the 34 patients, only one in the ketoacidosis group had hypoglycemia. There was no fatality or referral of any patient. CONCLUSION: This study demonstrates that IM regular insulin is a safe alternative method in managing DK and DKA in a family medicine setting	**NAT**	**JUL TO DEC**	**FAMILY MEDICINE, LCECU, COMMUNITY HEALTH**	**PMID:**29026743 **PMCID:**5629894 **Impact Factor:**0.670 **H-Index:**NA
65.	Baskaran, M., Arularasan, S. G., Divakar, T. K. and Thirunavukkarasu, R. Treatment of Micrognathia by Intraoral Distraction Osteogenesis: A Prospective Study	**INT**	**JUL TO DEC**	**ORAL AND MAXILLOFACIAL SURGERY**	**PMID:**28713734 **PMCID:**5502513 **Impact**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Ann Maxillofac Surg; 2017, 7 (1): 37-44 **Address:** Department of Oral and Maxillofacial Surgery, Rajas Dental College and Hospital, Tirunelveli, Tamil Nadu, India. Department of Oral and Maxillofacial Surgery, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Oral and Maxillofacial Surgery, Government Dental College and Hospital, Chennai, Tamil Nadu, India. PURPOSE: Maxillofacial deformities are always psychologically and physically distressing to the patients and is also challenging to the treating surgeons. The term Micrognathia means a "small jaw". True micrognathia, where the maxilla or the mandibular skeleton does not grow to the full size can be congenital or acquired. Distraction osteogenesis also called as callus distraction or callostasis or osteodistraction or distraction histogenesis is a biological process of regenerating newly formed bone and adjacent soft tissue by a gradual and controlled traction of surgically separated bone segments. The purpose of this prospective study was to assess the versatility of distraction osteogenesis in the treatment of micrognathia. MATERIALS AND METHODS: Four patients (three males and one female) with micrognathia of mandible were included in this prospective study. The patients were between the age group of 10-20 years. Facial asymmetry was the chief complaint of all the patients. In all the patients following treatment protocol was carried out, Osteotomy and placement of intraoral distraction device under general anaesthesia, latency phase (5-7 days), activation period-rate 1.5 mm per day, consolidation period of 8 weeks, removal of distraction device under local anaesthesia. The parameters assessed were ramus height, body length, hyo mental distance, posterior pharyngeal airway space, chin projection, facial symmetry occlusion, mid line shift pre and post operatively. RESULTS: The mean increase in ramus height achieved was 9.2 + 2.17 mm and the mandibular body length achieved was 10.4+1.67 mm. There was an average increase in hyo-mental distance of 2.75 cm +0.9 cm postoperatively showing a definitive improvement in the airway. The posterior pharyngeal space measured from the lateral cephalogram preoperatively ranged from 3-6 mm and post operatively from 6-9 mm.Intraorally there was a shift in occlusion to class I molar relation in three patients and there was posterior open bite in one patient. Marked correction of facial asymmetry was noticed in all cases both clinically and in PA cephalogram. There was a restoration of dental as well as lip midline and improved lip competence. There was a				**Factor:**NA **H-Index:**NA

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	significant improvement in chin projection and occlusal cant however further chin correction was needed in one case by means of advancement genioplasty. CONCLUSION: A definite improvement in all parameters such as body length,ramus height,chin projection,occlusal cant was observed in all patients. Moreover the patients were subjectively satisfied with the outcome of the results. Distraction Osteogenesis is definitely a boon to the oral and maxillofacial surgeons in treating large deficiencies of mandible in terms of stability.				
66.	Beck, Manisha Madhai, Rathore, Swati and Benjamin, Santhosh Joseph Acardiac Twin: A Report of Two Cases Journal of Fetal Medicine; 2017, 4 (3): 149-152 Address: Department of Obstetrics and Gynecology, **Christian Medical College, Vellore,** India Multiple gestations, especially monochorionic twins are associated with unique complications such as twin to twin transfusion syndrome (TTTS) and twin reversed arterial perfusion (TRAP) sequence due to preferential blood flow within the vascular communications between the two fetuses. TRAP sequence is a rare complication of monochorionic twins. The authors describe two cases of acardiac twins, one diagnosed at 17 weeks and the other at 24 weeks. While the first one was lost to follow-up, the second pregnancy was managed expectantly with close antepartum surveillance and had a term vaginal delivery of a healthy baby, along with the acardiac twin which was non-viable. The pump twin continues to be developmentally normal.	**INT**	**JUL TO DEC**	**OG IV / OG V**	**Not Indexed in PubMed** **Impact Factor:4** **H Index:5**
67.	Bennett, A., Nagelkerke, N., Heinsbroek, E., Premkumar, P. S., Wnek, M., Kang, G., French, N., Cunliffe, N. A., Bar-Zeev, N., Lopman, B. and Iturriza-Gomara, M. Estimating the incidence of rotavirus infection in children from India and Malawi from serial anti-rotavirus IgA titres PLoS One; 2017, 12 (12): e0190256 **Address:** Malawi-Liverpool-Wellcome Trust Clinical Research Programme, College of Medicine, University of Malawi, Blantyre, Malawi. Centre for Global Vaccine Research, Institute of Infection & Global Health, University of Liverpool, Liverpool, United Kingdom. Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India. Malawi Epidemiology and Intervention Research Unit/London School of Hygiene & Tropical Medicine, Chilumba, Malawi.	**INT**	**JUL TO DEC**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**29287122 **Impact Factor:** 2.806 **H-Index:**218

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Epidemiology, Rollins School of Public Health, Emory University, Atlanta, United States of America. NIHR Health Protection Research Unit in Gastrointestinal Infections, University of Liverpool, Liverpool, United Kingdom. Accurate estimates of rotavirus incidence in infants are crucial given disparities in rotavirus vaccine effectiveness from low-income settings. Sero-surveys are a pragmatic means of estimating incidence however serological data is prone to misclassification. This study used mixture models to estimate incidence of rotavirus infection from anti-rotavirus immunoglobulin A (IgA) titres in infants from Vellore, India, and Karonga, Malawi. IgA titres were measured using serum samples collected at 6 month intervals for 36 months from 373 infants from Vellore and 12 months from 66 infants from Karonga. Mixture models (two component Gaussian mixture distributions) were fit to the difference in titres between time points to estimate risk of sero-positivity and derive incidence estimates. A peak incidence of 1.05(95% confidence interval [CI]: 0.64, 1.64) infections per child-year was observed in the first 6 months of life in Vellore. This declined incrementally with each subsequent time interval. Contrastingly in Karonga incidence was greatest in the second 6 months of life (1.41 infections per child year [95% CI: 0.79, 2.29]). This study demonstrates that infants from Vellore experience peak rotavirus incidence earlier than those from Karonga. Identifying such differences in transmission patterns is important in informing vaccine strategy, particularly where vaccine effectiveness is modest.				
68.	Berendes, D., Kirby, A., Clennon, J. A., Raj, S., Yakubu, H., Leon, J., Robb, K., Kartikeyan, A., Hemavathy, P., Gunasekaran, A., Ghale, B., Kumar, J. S., Mohan, V. R., Kang, G. and Moe, C. The Influence of Household- and Community-Level Sanitation and Fecal Sludge Management on Urban Fecal Contamination in Households and Drains and Enteric Infection in Children Am J Trop Med Hyg; 2017, 96 (6): 1404-1414 **Address:** Department of Environmental Engineering, School of Civil and Environmental Engineering, Georgia Institute of Technology, Atlanta, Georgia. Center for Global Safe Water, Sanitation, and Hygiene, Rollins School of Public Health, Atlanta, Georgia. Hubert Department of Global Health, Rollins School of Public Health, Emory	**INT**	**JUL TO DEC**	**WELLCOME RESEARCH LABORATORY , COMMUNITY HEALTH, COMMUNITY HEALTH**	**PMID:**28719269 **PMCID:**5462580 **Impact Factor:**2.549 **H-Index:**126

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	University, Atlanta, Georgia. Department of Biostatistics and Bioinformatics, Rollins School of Public Health, Emory University, Atlanta, Georgia. Wellcome Research Laboratory, **Christian Medical College, Vellore,** India. Department of Community Health, **Christian Medical College, Vellore,** India. AbstractUrban sanitation necessitates management of fecal sludge inside and outside the household. This study examined associations between household sanitation, fecal contamination, and enteric infection in two low-income neighborhoods in Vellore, India. Surveys and spatial analysis assessed the presence and clustering of toilets and fecal sludge management (FSM) practices in 200 households. Fecal contamination was measured in environmental samples from 50 households and household drains. Enteric infection was assessed from stool specimens from children under 5 years of age in these households. The two neighborhoods differed significantly in toilet coverage (78% versus 33%) and spatial clustering. Overall, 49% of toilets discharged directly into open drains ("poor FSM"). Children in households with poor FSM had 3.78 times higher prevalence of enteric infection when compared with children in other households, even those without toilets. In the neighborhood with high coverage of household toilets, children in households with poor FSM had 10 times higher prevalence of enteric infection than other children in the neighborhood and drains in poor FSM clusters who had significantly higher concentrations of genogroup II norovirus. Conversely, children in households with a toilet that contained excreta in a tank onsite had 55% lower prevalence of enteric infection compared with the rest of the study area. Notably, households with a toilet in the neighborhood with low toilet coverage had more fecal contamination on floors where children played compared with those without a toilet. Overall, both toilet coverage levels and FSM were associated with environmental fecal contamination and, subsequently, enteric infection prevalence in this urban setting.				
69.	Berendes, D., Leon, J., Kirby, A., Clennon, J., Raj, S., Yakubu, H., Robb, K., Kartikeyan, A., Hemavathy, P., Gunasekaran, A., Roy, S., Ghale, B. C., Kumar, J. S., Mohan, V. R., Kang, G. and Moe, C. Household sanitation is associated with lower risk of bacterial and protozoal enteric infections, but not viral infections and diarrhea, in a cohort study in a low-income urban neighborhood in Vellore, India	**INT**	**JAN TO JUN**	**WELLCOME RESEARCH LABORATORY, COMMUNITY HEALTH, COMMUNITY HEALTH**	**PMID:**28653489 **Impact Factor:**2.850 **H-Index:**93

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Tropical Medicine & International Health; 2017, 22 (9): 1119-1129 **Address:** School of Civil and Environmental Engineering, Georgia Institute of Technology, Atlanta, USA. Center for Global Safe Water, Sanitation, and Hygiene, Rollins School of Public Health, Emory University, Atlanta, USA. Hubert Department of Global Health, Rollins School of Public Health, Emory University, Atlanta, USA. Department of Biostatistics, Rollins School of Public Health, Emory University, Atlanta, USA. Wellcome Research Laboratory, **Christian Medical College, Vellore,** India. Department of Community Health, **Christian Medical College, Vellore,** India. **OBJECTIVE:** This study examined associations between household sanitation and enteric infection-including diarrheal-specific outcomes-in children 0-2 years of age in a low-income, dense urban neighborhood. **METHODS:** As part of the MAL-ED study, 230 children in a low-income, urban, Indian neighborhood provided stool specimens at 14-17 scheduled time points and during diarrheal episodes in the first two years of life that were analyzed for bacterial, parasitic (protozoa and helminths), and viral pathogens. From interviews with caregivers in 100 households, the relationship between the presence (and discharge) of household sanitation facilities and any, pathogen-specific, and diarrhea-specific enteric infection was tested through mixed-effects Poisson regression models. **RESULTS:** Few study households (33%) reported having toilets, most of which (82%) discharged into open drains. Controlling for season and household socioeconomic status, the presence of a household toilet was associated with lower risks of enteric infection (RR: 0.91, 95% CI: 0.79-1.06), bacterial infection (RR: 0.87, 95% CI: 0.75-1.02), and protozoal infection (RR: 0.64, 95% CI: 0.39-1.04), though not statistically significant, but had no association with diarrhea (RR: 1.00, 95% CI: 0.68-1.45) or viral infections (RR: 1.12, 95% CI: 0.79-1.60). Models also suggested that the relationship between household toilets discharging to drains and enteric infection risk may vary by season. **CONCLUSIONS:** The presence of a household toilet was associated with lower risk of bacterial and protozoal enteric infections, but not diarrhea or viral infections, suggesting the health effects of sanitation may be more accurately estimated using outcome measures that account for etiologic agents.				
70.	Bharathan, S. P., Manian, K. V., Aalam, S. M., Palani, D., Deshpande, P. A., Pratheesh, M. D., Srivastava, A. and Velayudhan, S. R.	**INT**	**JAN TO JUN**	**HAEMATOLOGY, CENTRE FOR STEM**	**PMID:**28089995 **Impact Factor:**2.095

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Systematic evaluation of markers used for the identification of human induced pluripotent stem cells Biol Open; 2017, 6 (1): 100-108 **Address:** Department of Haematology, **Christian Medical College, Vellore,** Tamil Nadu, India. Centre for Stem Cell Research (Unit of InStem, Bengaluru), **Christian Medical College Campus,** Vellore, Tamil Nadu, India. Department of Haematology, **Christian Medical College, Vellore,** Tamil Nadu, India rvshaji@cmcvellore.ac.in Low efficiency of somatic cell reprogramming and heterogeneity among human induced pluripotent stem cells (hiPSCs) demand extensive characterization of isolated clones before their use in downstream applications. By monitoring human fibroblasts undergoing reprogramming for their morphological changes and expression of fibroblast (CD13), pluripotency markers (SSEA-4 and TRA-1-60) and a retrovirally expressed red fluorescent protein (RV-RFP), we compared the efficiency of these features to identify bona fide hiPSC colonies. The co-expression kinetics of fibroblast and pluripotency markers in the cells being reprogrammed and the emerging colonies revealed the heterogeneity within SSEA-4+ and TRA-1-60+ cells, and the inadequacy of these commonly used pluripotency markers for the identification of bona fide hiPSC colonies. The characteristic morphological changes in the emerging hiPSC colonies derived from fibroblasts expressing RV-RFP showed a good correlation between hiPSC morphology acquisition and silencing of RV-RFP and facilitated the easy identification of hiPSCs. The kinetics of retroviral silencing and pluripotency marker expression in emerging colonies suggested that combining both these markers could demarcate the stages of reprogramming with better precision than with pluripotency markers alone. Our results clearly demonstrate that the pluripotency markers that are routinely analyzed for the characterization of established iPSC colonies are not suitable for the isolation of pluripotent cells in the early stages of reprogramming, and silencing of retrovirally expressed reporter genes helps in the identification of colonies that have attained a pluripotent state and the morphology of human embryonic stem cells (hESCs).			**CELL RESEARCH**	**H-Index:**12
71.	Bharathan, S. P., Nandy, K., Palani, D., Janet, A. Nb, Natarajan, K., George, B., Srivastava, A. and Velayudhan, S. R. Generation of an induced pluripotent stem cell line that mimics the disease	**INT**	**JAN TO JUN**	**HAEMATOLOGY, CENTRE FOR STEM CELL**	**PMID:**28395741 **Impact Factor:** 3.494 **H-Index:**44

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	phenotypes from a patient with Fanconi anemia by conditional complementation Stem Cell Res; 2017, 20 54-57 **Address:** Haematology Department, **Christian Medical College, Vellore,** Tamil Nadu, India; Centre for Stem Cell Research, **Christian Medical College, Vellore,** Tamil Nadu, India. Centre for Stem Cell Research, **Christian Medical College, Vellore,** Tamil Nadu, India. Haematology Department, **Christian Medical College, Vellore,** Tamil Nadu, India. Haematology Department, **Christian Medical College, Vellore,** Tamil Nadu, India; Centre for Stem Cell Research, **Christian Medical College, Vellore,** Tamil Nadu, India. Electronic **Address:** rvshaji@cmcvellore.ac.in Generation of Fanconi anemia (FA) patient-specific induced pluripotent stem cells (iPSCs) has been reported to be technically challenging due to the defects in the FA-pathway in the patients' somatic cells. By inducible complementation of FA-pathway, we successfully reprogrammed the fibroblasts of an FA patient to iPSCs. CSCR19i-indCFANCA, one of the iPSC lines generated by the inducible complementation of FA-pathway, was extensively characterized for its pluripotency and karyotype. In the absence of doxycycline (DOX) and FANCA expression, this line showed the cellular phenotypes of FA, suggesting it is an excellent tool for FA disease modeling and drug screening.			**RESEARCH**	
72.	Bhatt, A. N., Tharyan, P., Michael, J. S., Christopher, D. J., Varghese, G. M., Sathyendra, S., Rajan, S. J., George, K. and Prasad, J. H. Treatment outcomes with daily self-administered treatment and thrice-weekly directly-observed treatment in two cohorts of newly-diagnosed, sputum-positive adults with pulmonary tuberculosis: A retrospective study from a not-for profit, private medical college in South India Indian Journal of Tuberculosis; 2017, https://doi.org/10.1016/j.ijtb.2017.05.012 **Address:** Community Health Department, **Christian Medical College, Vellore** 632002, Tamil Nadu, India B. V. Moses Centre for Evidence-Informed Health Care and Health Policy, **Christian Medical College, Vellore,** India Department of Microbiology, **Christian Medical College, Vellore,** India Department of Pulmonary Medicine, **Christian Medical College, Vellore,** India Department of Internal Medicine, **Christian Medical College, Vellore,** India	**NAT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY, PULMONARY MEDICINE, INTERNAL MEDICINE, COMMUNITY HEALTH**	**NO PMID NO PMCID SCOPUS Impact Factor:**0.41 **H-Index:**14

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Community Health, **Christian Medical College, Vellore,** India Background: The Revised National Tuberculosis Control Program (RNTCP) envisages shifting from thrice-weekly to a daily anti-tuberculosis treatment (ATT) regimen. The potential merits and demerits of both regimens continue to be debated. Methods: This retrospective study compared treatment outcomes in 191 HIV-negative, newly diagnosed, sputum-positive adults with pulmonary tuberculosis from Vellore district of Tamil Nadu who were treated at a private medical college during 2009 to 2012 with intermittent Directly Observed Treatment Short Course (intermittent DOTS cohort, n = 132) or who opted for daily Self-Administered Treatment (daily SAT cohort, n = 59). Treatment outcomes obtained from medical records were supplemented by interviews with consenting, traceable patients. Results: The rates for the RNTCP-recommended sputum smear examinations were suboptimal (42% for daily SAT and 72% for intermittent DOTS). However, treatment success with daily SAT and intermittent DOTS (76.2% vs. 70.4%); default (11.9% vs. 18.2%); death (6.8% vs. 5.3%); treatment failure (5.1% vs. 4.6%); and relapse (0% vs. 1.5%) did not significantly differ. Conclusions: While evaluable treatment outcomes were not significantly different with daily SAT and intermittent DOTS, rates for timely smear examinations and for treatment success were lower, and for default higher, in both cohorts than comparable RNTCP data from Vellore district. Further strengthening of RNTCP facilities within private medical colleges and regular, real-time audits of performance and outcomes are needed if daily ATT regimen under the RNTCP is to succeed. © 2017 Tuberculosis Association of India.				
73.	Bhowmick, R., Agarwal, I., Arumugam, V. and Kumar, T. S. Lupus Anticoagulant-Hypoprothrombinemia Syndrome Indian Journal of Pediatrics; 2017, 1-2 **Address:** Department of Child Health, **Christian Medical College and Hospital**Vellore, Vellore, Tamil Nadu, 632004, India. child2@cmcvellore.ac.in. Department of Child Health, **Christian Medical College and Hospital** Vellore, Vellore, Tamil Nadu, 632004, India.	**NAT**	**JUL TO DEC**	**CHILD HEALTH**	**PMID:**29139061 **Impact Factor:** 0.945 **H-Index:**40
74.	Bhullar, S. K., Rana, D., Lekesiz, H., Bedeloglu, A. C., Ko, J., Cho, Y., Aytac, Z., Uyar, T., Jun, M. and Ramalingam, M. Design and fabrication of auxetic PCL nanofiber membranes for biomedical	**INT**	**JUL TO DEC**	**CENTRE FOR STEM CELL RESEARCH**	**PMID:**28887981 **WOS:**000410253800040

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	applications Mater Sci Eng C Mater Biol Appl; 2017, 81 334-340 **Address:** Department of Mechanical Engineering, Bursa Technical University, Bursa, Turkey; Department of Mechanical Engineering, University of Victoria, Victoria, BC, Canada. Electronic address: kaur.bhullar@btu.edu.tr. Centre for Stem Cell Research (CSCR), A unit of Institute for Stem Cell Biology and Regenerative Medicine - Bengaluru, **Christian Medical College Campus,** Vellore 632002, India. Department of Mechanical Engineering, Bursa Technical University, Bursa, Turkey. Department of Fiber and Polymer Engineering, Bursa Technical University, Bursa, Turkey. Department of Mechanical Engineering, University of Victoria, Victoria, BC, Canada. Institute of Materials Science & Nanotechnology, UNAM-National Nanotechnology Research Center, Bilkent University, 06800 Ankara, Turkey. Centre for Stem Cell Research (CSCR), A unit of Institute for Stem Cell Biology and Regenerative Medicine - Bengaluru, **Christian Medical College Campus,** Vellore 632002, India; WPI-Advanced Institute for Materials Research, Tohoku University, Sendai 980-8577, Japan. Electronic address: rmurug2000@gmail.com. The main objective of this study was to fabricate poly (epsilon-caprolactone) (PCL)-based auxetic nanofiber membranes and characterize them for their mechanical and physicochemical properties. As a first step, the PCL nanofibers were fabricated by electrospinning with two different thicknesses of 40mum (called PCL thin membrane) and 180mum (called PCL thick membrane). In the second step, they were tailored into auxetic patterns using femtosecond laser cut technique. The physicochemical and mechanical properties of the auxetic nanofiber membranes were studied and compared with the conventional electrospun PCL nanofibers (non-auxetic nanofiber membranes) as a control. The results showed that there were no significant changes observed among them in terms of their chemical functionality and thermal property. However, there was a notable difference observed in the mechanical properties. For instance, the thin auxetic nanofiber membrane showed the magnitude of elongation almost ten times higher than the control, which clearly demonstrates the high flexibility of auxetic nanofiber membranes. This is because that the auxetic nanofiber membranes have lesser rigidity than the control nanofibers under the same load which could be due to the rotational motion of the auxetic structures. The major finding of this study is that				**Impact Factor:** 4.164 **H-Index:**89

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	the auxetic PCL nanofiber membranes are highly flexible (10-fold higher elongation capacity than the conventional PCL nanofibers) and have tunable mechanical properties. Therefore, the auxetic PCL nanofiber membranes may serve as a potent material in various biomedical applications, in particular, tissue engineering where scaffolds with mechanical cues play a major role.				
75.	Binu, A. J., Cherian, K. E., Kapoor, N., Chacko, S. T., George, O. and Paul, T. V. The Heart of the Matter: Cardiac Manifestations of Endocrine Disease Indian J Endocrinol Metab; 2017, 21 (6): 919-925 **Address:** Department of General Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Cardiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Endocrine disorders manifest as a disturbance in the milieu of multiple organ systems. The cardiovascular system may be directly affected or alter its function to maintain the state of homeostasis. In this article, we aim to review the pathophysiology, diagnosis, clinical features and management of cardiac manifestations of various endocrine disorders.	**NAT**	**JUL TO DEC**	**GENERAL MEDICINE, ENDOCRINOLOGY, CARDIOLOGY**	**PMID:**29285459 **PMCID:**5729684 **Impact Factor:**NA **H-Index:**7
76.	Binu, A. J., Cherian, K. E., Kapoor, N., Hephzibah, J. and Paul, T. V. VISUAL VIGNETTE Endocr Pract; 2017, **Address:** From: 1Department of Internal Medicine; **Christian Medical College**& Hospital, Vellore - 632 004. Department of Endocrinology, Diabetes & Metabolism; **Christian Medical College**& Hospital, Vellore - 632 004. Department of Nuclear Medicine; **Christian Medical College**& Hospital, Vellore - 632 004.	**INT**	**JUL TO DEC**	**INTERNAL MEDICINE, ENDOCRINOLOGY, NUCLEAR MEDICINE**	**PMID:**29144797 **Impact Factor:** 2.347 **H-Index:**68
77.	Birendra, R., John, N. T., Duhli, N., Devasia, A., Kekre, N. and Manojkumar, R. Histopathological analysis of the non - tumour parenchyma following radical nephrectomy: can it predict renal functional outcome?	**INT**	**JAN TO JUN**	**UROLOGY, PATHOLOGY**	**PMID:**28379664 **Impact Factor:** 0.815 **H-Index:**30

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	International Braz J Urol; 2017, 43 (4): 655-660 **Address:** Department of Urology, **Christian Medical College, Vellore**. Department of Pathology, **Christian Medical College, Vellore**. **INTRODUCTION:** Radical nephrectomy (RN), a recommended treatment option for patients with Renal cell carcinoma (RCC) leads to an inevitable decline in global renal function. Pathological changes in the non-tumour parenchyma of the kidney may help predict the function of the remaining kidney. **MATERIALS AND METHODS:** Aim of this prospective, observational study was to find histopathological factors in the non-tumor renal parenchyma that could predict the decline in global renal function postoperatively and its association with co-morbidities like diabetes (DM). Data of consecutive patients undergoing RN from December-2013 to January-2015 was collected. Non-tumor parenchyma of the specimen was reported by a dedicated histopathologist. eGFR was calculated using Cockcroft-Gault formula before the surgery and at last follow up of at least 12 months. **RESULTS:** 73 RN specimens were analyzed. Mean follow up was 12.3 months. The mean decrease in eGFR was 22% (p=.0001). Percent decrease in eGFR did not show association with any of the histopathological parameters studied. DM was significantly associated with decrease in percent eGFR ($p<0.05$) and increase in arteriolar hyalinosis (p=0.004), Glomerulosclerosis (p=0.03) and Interstitial fibrosis/ Tubular atrophy (p=.0001). Maximum size of the tumor showed a negative correlation with percentage change in eGFR (p=.028). **CONCLUSION:** Histological parameters in the non-tumour portion of the RN specimen may not be able to predict renal function outcome over a short follow up. However, presence of DM was associated with adverse pathological changes and significant decrease in renal function postoperatively.				
78.	Boaz, R. J., Vig, T., Manojkumar, R. and Devasia, A. Incision site metastasis: Adding insult to injury J Cancer Res Ther; 2017, 13 (6): 1068-1069 **Address:** Department of Urology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Pathology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Incision site metastasis is a rare yet well-recognized complication of oncologic	**INT**	**JUL TO DEC**	**UROLOGY, PATHOLOGY**	**PMID:**29237981 **Impact Factor:**0.750 **H-Index:**25

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	operations. We describe the case of a 60-year-old man with a large mass at the site of abdominal incision for a nephrectomy. The operation was performed for infection in an obstructed kidney, which in retrospect harbored malignancy. Percutaneous core biopsy of the mass revealed metastatic conventional renal cell carcinoma (RCC). Surgical resection was obviated by the presence of nodal disease on imaging. Palliative targeted therapy with tyrosine kinase inhibitor was initiated. RCC can not only mimic an inflammatory renal mass radiologically but also coexist with infective renal conditions. Diligent histopathological examination as a routine following nephrectomy for complicated diagnoses is imperative.				
79.	Boaz, R. J., Vig, T., Tirkey, A. J., John, N. T., Kumar, R. M. and Kekre, N. Cutaneous metastasis of renal cell carcinoma masquerading as an infected sebaceous cyst J Stomatol Oral Maxillofac Surg; 2017, **Address:** Department of Urology, **Christian Medical College, Vellore,** India. Department of Pathology, **Christian Medical College, Vellore,** India. Electronic address: medicovig@gmail.com. Department of Head and Neck Surgery, **Christian Medical College, Vellore,** India. Department of Pathology, **Christian Medical College, Vellore,** India. Renal cell carcinoma (RCC) is the third most common genitourinary malignancy with an estimated one third of cases with metastatic disease at the time of diagnosis. Though rare, cutaneous metastasis from RCC is more frequent than any other genitourinary malignancy. Metastasis of RCC to skin carries poor prognosis as coexistent visceral spread is the norm. A 38-year-old man presented one year after radical nephrectomy for clear cell carcinoma of the left kidney with a submental lesion that proved to be metastatic. Clinical appearance of cutaneous RCC metastasis is varied and can closely mimic other skin lesions. It is incumbent on general practitioners, dermatologists and urologists to exercise diligence in clinical diagnosis of skin lesions in the background of previous oncological diagnosis.	**INT**	**JUL TO DEC**	**UROLOGY, PATHOLOGY, HEAD AND NECK SURGERY**	**PMID:**29128599 **Impact Factor:** NA **H-Index:**NA
80.	Borra, S. K., Peter, D. C. V., Balakrishnan, N., Pulimood, S. and Bhindra, M. Blastomycosis-like pyoderma: Novel use of potassium iodide Indian J Dermatol Venereol Leprol; 2017, 83 (6): 720-721 **Address:** Department of Dermatology, Venereology and Leprosy, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JUL TO DEC**	**DERMATOLOGY, PATHOLOGY**	**PMID:**28980537 **WOS:**000413735000024 **Impact Factor:** 1.948 **H-Index:**34

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Pathology, **Christian Medical College, Vellore,** Tamil Nadu, India.				
81.	Brito-Zeron, P., Acar-Denizli, N., Zeher, M., Rasmussen, A., Seror, R., Theander, E., Li, X., Baldini, C., Gottenberg, J. E., Danda, D., Quartuccio, L., Priori, R., Hernandez-Molina, G., Kruize, A. A., Valim, V., Kvarnstrom, M., Sene, D., Gerli, R., Praprotnik, S., Isenberg, D., Solans, R., Rischmueller, M., Kwok, S. K., Nordmark, G., Suzuki, Y., Giacomelli, R., Devauchelle-Pensec, V., Bombardieri, M., Hofauer, B., Bootsma, H., Brun, J. G., Fraile, G., Carsons, S. E., Gheita, T. A., Morel, J., Vollenveider, C., Atzeni, F., Retamozo, S., Horvath, I. F., Sivils, K., Mandl, T., Sandhya, P., De Vita, S., Sanchez-Guerrero, J., Van Der Heijden, E., Trevisani, V. F. M., Wahren-Herlenius, M., Mariette, X. and Ramos-Casals, M. Influence of geolocation and ethnicity on the phenotypic expression of primary Sjogren's syndrome at diagnosis in 8310 patients: a cross-sectional study from the Big Data Sjogren Project Consortium Ann Rheum Dis; 2017, 76 (6): 1042-1050 **Address:** Autoimmune Diseases Unit, Department of Medicine, Hospital CIMA-Sanitas, Barcelona, Spain. Sjogren Syndrome Research Group (AGAUR), Laboratory of Autoimmune Diseases Josep Font, IDIBAPS-CELLEX, Department of Autoimmune Diseases, ICMiD, University of Barcelona, Hospital Clinic, Barcelona, Spain. Department of Statistics, Faculty of Science and Letters, Mimar Sinan Fine Arts University, Istanbul, Turkey. Division of Clinical Immunology, Faculty of Medicine, University of Debrecen, Debrecen, Hungary. Arthritis and Clinical Immunology Research Program, Oklahoma Medical Research Foundation, Oklahoma City, Oklahoma, USA. Center for Immunology of Viral Infections and Autoimmune Diseases, Assistance Publique-Hopitaux de Paris, Hopitaux Universitaires Paris-Sud, Le Kremlin-Bicetre, Universite Paris Sud, INSERM U1184, Paris, France. Department of Rheumatology, Malmo University Hospital, Lund University, Lund, Sweden. Department of Rheumatology and Immunology, Anhui Provincial Hospital, Hefei, China. Rheumatology Unit, University of Pisa, Pisa, Italy. Department of Rheumatology, Strasbourg University Hospital, Universite de Strasbourg, CNRS, Strasbourg, France. Department of Clinical Immunology & Rheumatology, **Christian Medical College**& Hospital, Vellore, India. Clinic of Rheumatology, Department of Medical and Biological Sciences, University Hospital "Santa Maria della Misericordia", Udine, Italy. Department of Internal Medicine and	**INT**	**JAN TO JUN**	**CLINICAL IMMUNOLOGY & RHEUMATOLOGY**	**PMID:**27899373 **Impact Factor:**12.811 **H-Index:**189

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Medical Specialties, Rheumatology Clinic, Sapienza University of Rome, Rome, Italy. Immunology and Rheumatology Department, Instituto Nacional de Ciencias Medicas y Nutricion Salvador Zubiran. Mexico City, Mexico. Department of Rheumatology and Clinical Immunology, University Medical Center Utrecht, Utrecht, The Netherlands. Department of Medicine, Federal University of Espirito Santo, Vitoria, Brazil. Department of Medicine, Solna, Unit of Experimental Rheumatology, Karolinska Institutet, and Karolinska University Hospital, Stockholm, Sweden. Departement de Medecine Interne, Hopital Lariboisiere, Universite Paris VII, Assistance Publique-Hopitaux de Paris, Paris, France. Rheumatology Unit, Department of Medicine, University of Perugia, Perugia, Italy. Department of Rheumatology, University Medical Centre, Ljubljana, Slovenia. Division of Medicine, Centre for Rheumatology, University College London, London, UK. Department of Internal Medicine, Hospital Vall d'Hebron, Barcelona, Spain. Department of Rheumatology, The Queen Elizabeth Hospital, Discipline of Medicine University of Adelaide, South Australia. Division of Rheumatology, Seoul St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Seoul, South Korea. Rheumatology, Department of Medical Sciences, Uppsala University, Uppsala, Sweden. Division of Rheumatology, Kanazawa University Hospital, Kanazawa, Ishikawa, Japan. Clinical Unit of Rheumatology, School of Medicine, University of l'Aquila, L'Aquila, Italy. Rheumatology Department, Brest University Hospital, Brest, France. Centre for Experimental Medicine and Rheumatology, Queen Mary University of London, London, UK. Otorhinolaryngology / Head and Neck Surgery, Technical University Munich, Munich, Germany. Department of Rheumatology & Clinical Immunology, University of Groningen, University Medical Center Groningen, Groningen, The Netherlands. Department of Clinical Science, University of Bergen; and Department of Rheumatology, Haukeland University Hospital, Bergen, Norway. Department of Internal Medicine, Hospital Ramon y Cajal, Madrid, Spain. Division of Rheumatology, Allergy and Immunology Winthrop-University Hospital, Stony Brook University School of Medicine, Mineola, New York, USA. Rheumatology Department, Kasr Al Ainy School of Medicine, Cairo University, Cairo, Egypt. Department of Rheumatology, Teaching hospital and University of Montpellier, Montpellier, France. German Hospital, Buenos Aires, Argentina. IRCCS Galeazzi Orthopedic Institute, Milan, Italy. Hospital Privado Universitario de Cordoba, Institute University of Biomedical Sciences University of Cordoba (IUCBC), Cordoba, Argentina. Federal University of Sao Paulo, Sao Paulo, Brazil. Department of Medicine, University of Barcelona, Barcelona, Spain.				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	OBJECTIVES: To analyse the influence of geolocation and ethnicity on the clinical presentation of primary Sjogren's syndrome (SjS) at diagnosis. **METHODS:** The Big Data Sjogren Project Consortium is an international, multicentre registry designed in 2014. By January 2016, 20 centres from five continents were participating. Multivariable logistic regression analyses were performed. **RESULTS:** We included 7748 women (93%) and 562 men (7%), with a mean age at diagnosis of primary SjS of 53 years. Ethnicity data were available for 7884 patients (95%): 6174 patients (78%) were white, 1066 patients (14%) were Asian, 393 patients (5%) were Hispanic, 104 patients (1%) were black/African-American and 147 patients (2%) were of other ethnicities. SjS was diagnosed a mean of 7 years earlier in black/African-American compared with white patients; the female-to-male ratio was highest in Asian patients (27:1) and lowest in black/African-American patients (7:1); the prevalence of sicca symptoms was lowest in Asian patients; a higher frequency of positive salivary biopsy was found in Hispanic and white patients. A north-south gradient was found with respect to a lower frequency of ocular involvement in northern countries for dry eyes and abnormal ocular tests in Europe (OR 0.46 and 0.44, respectively) and Asia (OR 0.18 and 0.49, respectively) compared with southern countries. Higher frequencies of antinuclear antibodies (ANAs) were reported in northern countries in America (OR=1.48) and Asia (OR=3.80) while, in Europe, northern countries had lowest frequencies of ANAs (OR=0.67) and Ro/La (OR=0.69). **CONCLUSIONS:** This study provides the first evidence of a strong influence of geolocation and ethnicity on the phenotype of primary SjS at diagnosis.				
82.	Burad, D. K. and Ramakrishna, B. Cytological diagnosis of biliary cryptococcosis in an immunocompromised patient with mid common bile duct stricture masquerading as cholangiocarcinoma Cytopathology; 2017, 28 (2): 164-167 **Address:** Department of General Pathology, **Christian Medical College, Vellore,** Tamil Nadu, India.	**INT**	**JAN TO JUN**	**GENERAL PATHOLOGY**	**PMID:**27592857 **Impact Factor:** 2.380 **H-Index:**40
83.	Carey, R. A. B., Chandiraseharan, V. K., Jasper, A., Sebastian, T., Gujjarlamudi, C., Sathyendra, S., Zachariah, A., Abraham, A. M. and Sudarsanam, T. D. Varicella Zoster Virus Infection of the Central Nervous System - 10 Year Experience from a Tertiary Hospital in South India	**NAT**	**JAN TO JUN**	**MEDICINE, RADIOLOGY, BIOSTATISTICS, CLINICAL VIROLOGY**	**PMID:**28615901 **Impact Factor:**0.950 **H-Index:**17

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Ann Indian Acad Neurol; 2017, 20 (2): 149-152 **Address:** Department of Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Radiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Clinical Virology, **Christian Medical College, Vellore,** Tamil Nadu, India. **INTRODUCTION:** Varicella zoster virus is an exclusively human neurotrophic virus. The primary infection with the virus causes varicella. The virus remains latent in nervous tissue and upon secondary activation causes a variety of syndromes involving the central nervous system (CNS) including meningoencephalitis and cerebellitis. **MATERIALS AND METHODS:** In this study, we looked at the epidemiology, clinical and laboratory features, and outcomes of patients who were admitted with varicella zoster of the CNS from 2005 to 2014. **RESULTS:** There were 17 patients. Fever was present in 13 patients, seizures in 9 patients and headache and vomiting in 4 patients each. A generalized varicella rash was present in 8 out of 17 patients. A single dermatomal herpes zoster was present in seven patients. Two patients had no rash. Varicella zoster polymerase chain reaction (PCR) in cerebrospinal fluid (CSF) was done in 5 patients of which 4 were positive and 1 was negative. Nine patients had diabetes with an average glycated hemoglobin of 8.6%. Total number of deaths was five. **CONCLUSIONS:** Patients with diabetes who develop varicella or herpes zoster may be at risk for CNS complications. The diagnosis of varicella encephalitis has to rest on a combination of clinical findings and CSF PCR, as neither the rash nor the PCR is sensitive enough to diagnose all the cases with varicella encephalitis.				
84.	Cecilia, D., Patil, J. A., Kakade, M. B., Walimbe, A., Alagarasu, K., Anukumar, B. and Abraham, A. Emergence of the Asian genotype of DENV-1 in South India Virology; 2017, 510 40-45 **Address:** Dengue Group, ICMR-National Institute of Virology, 20-A Ambedkar Road, Pune 411001, Maharashtra, India. Electronic address: cecilia.dayaraj@gmail.com. Dengue Group, ICMR-National Institute of Virology, 20-A Ambedkar Road, Pune 411001, Maharashtra, India.	**INT**	**JUL TO DEC**	**CLINICAL VIROLOGY**	**PMID:**28704695 **Impact Factor:**0.950 **H-Index:**17

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	ICMR-NIV Kerala Unit, Allappuzha, Kerala, India. **Christian Medical College, Vellore,** Tamil Nadu, India. A large outbreak of dengue occurred in Tamil Nadu, South India in 2012 with 12,000 cases and CFR of 0.5%. Molecular characterization of virus present in the sera of dengue patients was undertaken to determine if there were changes in the virus population. All four serotypes were circulating but DENV-1 was dominant, present in 52% of the serotyped samples. Furthermore, the genotype of only DENV-1 had changed; the Asian genotype had displaced the American/African. Phylogenetic analysis revealed that the Asian genotype was introduced from Singapore and shared 99% similarity with viruses, associated with large outbreaks in Singapore and Sri Lanka. We report for the first time the emergence of the Asian genotype of DENV-1 in southern India causing an extensive and severe outbreak. The study proves how movement of DENV can affect dengue outbreaks and underscores the need for close molecular monitoring of DENV.				
85.	Chacko, B. R., Chiramel, G. K., Vimala, L. R., Manuel, D. A., Joseph, E. and Reka, K. Spectrum of pulmonary valve morphology and its relationship to pulmonary trunk in tetralogy of Fallot Indian J Radiol Imaging; 2017, 27 (1): 65-69 **Address:** Department of Radiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Cardiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India. **BACKGROUND:** Tetralogy of Fallot (TOF) is a complex congenital heart disease with anatomic variations. Although the pulmonary valve in TOF is abnormal, it has not been studied well, especially on newer imaging modalities such as multidetector computed tomography (CT), which gives excellent anatomic detail. **AIMS:** The aim of this study was to assess the morphology of pulmonary valve in TOF on CT and evaluate its association with the degree of hypoplasia of infundibulum and pulmonary trunk. **MATERIALS AND METHODS:** The cardiac CT scans of 30 patients with TOF were reviewed to evaluate the morphology of the	**NAT**	**JAN TO JUN**	**RADIOLOGY, CARDIOLOGY, BIOSTATISTICS**	**PMID:**28515589 **Impact Factor:** NA **H-Index:**15

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	pulmonary valve, infundibulum, and pulmonary arteries. Fisher's exact test was performed to examine the association between pulmonary valve morphology and degree of hypoplasia of the infundibulum and pulmonary trunk. **RESULTS:** 16.7% of patients with TOF had pulmonary atresia. The prevalence of tricuspid, bicuspid, and absent valves were 10%, 53.3% and 6.7%, respectively. In another 13.3% of patients, although valve tissue was present, exact morphology could not be determined on CT. The commissures of 62.5% of the bicuspid valves were at 12 o'clock and 6 o'clock or slightly off the midline. There was statistically significant association between valve morphology and degree of infundibular hypoplasia ($P < 0.001$) and calibre of pulmonary trunk ($P < 0.001$). **CONCLUSION:** Morphological abnormality of the pulmonary valve is common in TOF. The most common type of pulmonary valve in TOF patients is bicuspid valve with commissures at 12 o'clock and 6 o'clock or slightly off the midline. Fewer cusps of the pulmonary valve are associated with a more severe degree of pulmonary artery hypoplasia.				
86.	Chacko, B., Thomas, K., David, T., Paul, H., Jeyaseelan, L. and Peter, J. V. Attributable cost of a nosocomial infection in the intensive care unit: A prospective cohort study World J Crit Care Med. 2017 Feb 4;6(1):79-84. doi: 10.5492/wjccm.v6.i1.79. eCollection 2017 Feb 4 **Address:** Binila Chacko, John Victor Peter, Medical ICU, Division of Critical Care, **Christian Medical College, Vellore** 632004, Tamil Nadu, India. **AIM:** To study the impact of hospital-acquired infections (HAIs) on cost and outcome from intensive care units (ICU) in India. **METHODS:** Adult patients (> 18 years) admitted over 1-year, to a 24-bed medical critical care unit in India, were enrolled prospectively. Treatment cost and outcome data were collected. This cost data was merged with HAI data collected prospectively by the Hospital Infection Control Committee. Only infections occurring during ICU stay were included. The impact of HAI on treatment cost and mortality was assessed. **RESULTS:** The mean (+/- SD) age of the cohort (n = 499) was 42.3 +/- 16.5 years. Acute physiology and chronic health evaluation-II score was 13.9 (95%CI: 13.3-14.5); 86% were ventilated. ICU and hospital length of stay were 7.8 +/- 5.5 and 13.9 +/- 10 d respectively. Hospital mortality was 27.9%. During ICU stay, 76 (15.3%) patients developed an infection (ventilator-associated pneumonia 50; bloodstream	**INT**	**JAN TO JUN**	**MEDICAL ICU, MEDICINE UNIT II, BIOSTATISTICS**	**PMID:**28224111 **Impact Factor:** NA **H-Index:**NA

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	infection 35; urinary tract infections 3), translating to 19.7 infections/1000 ICU days. When compared with those who did not develop an infection, an infection occurring during ICU stay was associated with significantly higher treatment cost [median (inter-quartile range, IQR) INR 92893 (USD 1523) (IQR 57168-140286) vs INR 180469 (USD 2958) (IQR 140030-237525); P < 0.001 and longer duration of ICU (6.7 +/- 4.5 d vs 13.4 +/- 7.0 d; P < 0.01) and hospital stay (12.4 +/- 8.2 d vs 21.8 +/- 13.9 d; P < 0.001)]. However ICU acquired infections did not impact hospital mortality (31.6% vs 27.2%; P = 0.49). **CONCLUSION:** An infection acquired during ICU stay was associated with doubling of treatment cost and prolonged hospitalization but did not significantly increase mortality.				
87.	Chacko, R., Rajan, A., Lionel, P., Thilagavathi, M., Yadav, B. and Premkumar, J. Oral decontamination techniques and ventilator-associated pneumonia Br J Nurs; 2017, 26 (11): 594-599 **Address:** Nurse Manager, Medical ICU, and Lecturer, College of Nursing, **Christian Medical College, Vellore,** India. Professor, College of Nursing, **Christian Medical College, Vellore,** India. (at the time of study) Charge Nurse, Medical Intensive Care Unit, **Christian Medical College, Vellore,** India. Charge Nurse, Medical High Dependency Unit, **Christian Medical College, Vellore,** India. Senior Demonstrator, Department of Biostatistics, **Christian Medical College, Vellore,** India. (at the time of study) Professor, College of Nursing, **Christian Medical College, Vellore,** India. Ventilator-associated pneumonia (VAP) is one of the major nosocomial infections in the intensive care unit (ICU), contributing to increased mortality and morbidity. Studies have shown that oral decontamination through the use of mechanical and pharmacological agents significantly reduces the incidence of VAP, but oral care practices in ICUs are not consistent. A double-blind randomised controlled trial was undertaken in the medical ICU of a tertiary care centre in India, to assess the efficacy of a toothbrush-based oral care technique in reducing incidence of VAP. Tooth-brushing with concurrent suctioning technique was not proved to be superior to mouth-swabbing. The greatest risk factor for developing VAP was the number of ventilator days (length of time on a ventilator). There was a statistical association between gender and presence of antibiotics with VAP.	**INT**	**JAN TO JUN**	**MEDICAL ICU, MEDICINE UNIT II, BIOSTATISTICS, COLLEGE OF NURSING**	**PMID:**28594615 **Impact Factor:**0.470 **H-Index:**36
88.	Chaitanya, V. S., Cuello, L., Das, M., Sudharsan, A., Ganesan, P., Kanmani, K., Rajan, L. and Ebenezer, M.	**INT**	**JUL TO DEC**	**DERMATOLOGY**	**PMID:**28317797 **Impact**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Analysis of a novel multiplex polymerase chain reaction assay as a sensitive tool for the diagnosis of indeterminate and tuberculoid forms of leprosy Int J Mycobacteriol; 2017, 6 (1): 1-8 **Address:** Division of Molecular Biology and Immunology, Schieffelin Institute of Health Research and Leprosy Centre, Karigiri, Vellore, Tamil Nadu, India. Department of Biology, Regents Hall of Natural Science, Northfield, MN 55057, USA. OBJECTIVE/BACKGROUND: Clinical diagnosis of indeterminate and tuberculoid leprosy is often difficult due to limited and confounding signs and symptoms. In the current study, we evaluated the utility of new multiplex polymerase chain reaction (PCR) using Mycobacterium leprae-specific DNA sequences in the pseudogene regions of ML1545, ML2180, and ML2179 for PCR-based diagnosis of indeterminate leprosy (IND) and leprosy cases across the immunological spectrum. The sensitivity was compared with that of RLEP PCR. METHODS: DNA was extracted from paraffin-embedded skin biopsy specimens of 220 leprosy cases, which were divided into IND (41), tuberculoid form (3), borderline tuberculoid (42), midborderline (3), borderline lepromatous (n=59), and lepromatous leprosy (72) cases. PCR positivity of both multiplex and RLEP PCR were compared in all the samples. A decision tree was constructed using the classification and regression trees algorithm to predict the probability of PCR positivity with the new multiplex PCR scheme in various clinical groups of leprosy. Sensitivity of each pseudogene target was determined using real-time PCR assays, and specificity was confirmed by PCR amplification of DNA extracted from three other mycobacterial species and skin biopsies of 44 non-leprosy cases. RESULTS: A multiplex PCR positivity of 75.61% was noted in IND cases when compared to that of 58.54% using RLEP PCR ($P < 0.05$). Enhanced multiplex PCR positivity was noted across various clinical groups in comparison to RLEP PCR. The decision tree classifier has predicted statistically significant probability for multiplex PCR positivity among RLEP-PCR negative group and clinical groups with a low bacillary load. CONCLUSION: This new multiplex PCR scheme can support the diagnosis of indeterminate and tuberculoid forms of leprosy with limited clinical manifestations and can be implemented in basic clinical/diagnostic setting that possess conventional PCR facilities.				**Factor:**0.400 **H-Index:**6
89.	Chan, R. J., Yates, P., Li, Q., Komatsu, H., Lopez, V., Thandar, M., Chacko, S. T.,	**INT**	**JUL TO**	**COLLEGE OF**	**PMID:**29110686

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	So, W. K. W., Pongthavornkamol, K., Yi, M., Pittayapan, P., Butcon, J., Wyld, D. and Molassiotis, A. Oncology practitioners' perspectives and practice patterns of post-treatment cancer survivorship care in the Asia-Pacific region: results from the STEP study BMC Cancer; 2017, 17 (1): 715 **Address:** School of Nursing and Institute of Health and Biomedical Innovation, Queensland University of Technology, Brisbane, Australia. raymond.chan@qut.edu.au. Cancer Care Services, Royal Brisbane and Women's Hospital, Brisbane, Australia. raymond.chan@qut.edu.au. School of Nursing and Institute of Health and Biomedical Innovation, Queensland University of Technology, Brisbane, Australia. Cancer Care Services, Royal Brisbane and Women's Hospital, Brisbane, Australia. Wuxi Medical School, Jiangnan University, Wuxi, Jiangsu, China. Faculty of Nursing and Medical Care, Keio University, Tokyo, Japan. Alice Lee Centre for Nursing Studies, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore. The University of Nursing, Yangon, Myanmar. College of Nursing, **Christian Medical College, Vellore,** India. The Nethersole School of Nursing, The Chinese University of Hong Kong, Hong Kong, China. Faculty of Nursing, Mahidol University, Bangkok, Thailand. College of Nursing and Research Institute of Nursing Science, Seoul National University, Seoul, Republic of Korea. Nursing Department of Siriraj Hospital, Mahidol University, Bangkok, Thailand. College of Medicine, Bicol University, Bicol, Philippines. School of Nursing, Hong Kong Polytechnic University, Hong Kong, China. BACKGROUND: Most efforts to advance cancer survivorship care have occurred in Western countries. There has been limited research towards gaining a comprehensive understanding of survivorship care provision in the Asia-Pacific region. This study aimed to establish the perceptions of responsibility, confidence, and frequency of survivorship care practices of oncology practitioners and examine their perspectives on factors that impede quality survivorship care. METHODS: A cross-sectional survey of hospital-based oncology practitioners in 10 Asia-Pacific countries was undertaken between May 2015-October 2016. The participating		**DEC**	**NURSING**	**PMCID:**5674781 **WOS:**000414676500007 **Impact Factor:**3.288 **H-Index:**96

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	countries included Australia, Hong Kong, China, Japan, South Korea, Thailand, Singapore, India, Myanmar, and The Philippines. The survey was administered using paper-based or online questionnaires via specialist cancer care settings, educational meetings, and professional organisations. RESULTS: In total, 1501 oncology practitioners participated in the study. When comparing the subscales of responsibility perception, frequency and confidence, Australian practitioners had significantly higher ratings than practitioners in Hong Kong, Japan, Thailand, and Singapore (all $p < 0.05$). Surprisingly, practitioners working in Low- and Mid-Income Countries (LMICs) had higher levels of responsibility perception, confidence and frequencies of delivering survivorship care than those working in High-Income Countries (HICs) ($p < 0.001$), except for the responsibility perception of care coordination where no difference in scores was observed ($p = 0.83$). Physicians were more confident in delivering most of the survivorship care interventions compared to nurses and allied-health professionals. Perceived barriers to survivorship care were similar across the HICs and LMICs, with the most highly rated items for all practitioners being lack of time, dedicated educational resources for patients and family members, and evidence-based practice guidelines informing survivorship care. CONCLUSIONS: Different survivorship practices have been observed between HICs and LMICs, Australia and other countries and between the professional disciplines. Future service planning and research efforts should take these findings into account and overcome barriers identified in this study.				
90.	Chandramohan, A., Therese, M., Abhraham, D., Paul, T. V. and Mazhuvanchary, P. J. Can ARFI elastography be used to differentiate parathyroid from thyroid lesions? Journal of Endocrinological Investigation; 2017, 1-9 **Address: Christian Medical College and Hospital** Vellore, Vellore, Tamil Nadu, India. anuradhachandramohan@gmail.com. **Christian Medical College and Hospital** Vellore, Vellore, Tamil Nadu, India. **OBJECTIVES:** To assess if elasticity score (ES) and shear wave velocity (SWV) measurement obtained using ARFI elastography can differentiate between parathyroid lesions and thyroid nodules. **MATERIALS AND METHODS:** ARFI elastography was performed on patients with primary hyperparathyroidism or solid thyroid nodules who were being considered for surgery using virtual touch	**INT**	**JAN TO JUN**	**ENDOCRINE SURGERY**	**PMID:**28569362 **Impact Factor:** 2.633 **H-Index:**70

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	quantification and virtual touch imaging (VTI) software. Only patients with surgical histopathology (47 parathyroid lesions, 38 benign thyroid nodules and 55 malignant thyroid nodules) were included for final analysis. SWV and ES of the parathyroid and thyroid nodules were compared and their ability to differentiate between parathyroid and thyroid was analyzed using receiver operating characteristic curve analysis. **RESULTS:** There were 39 solitary adenomas, 2 double adenomas and 4 parathyroid hyperplasias with mean size of 19.6 +/- 9.7 mm in 44 patients (21 male, 23 females) with primary hyperparathyroidism. The mean SWV of the parathyroid lesion (1.6 +/- 0.78 m/s) was significantly different from benign (2.11 +/- 0.8 m/s) and malignant (4.3 +/- 2.71 m/s) thyroid nodules, $p < 0.05$; so was the ES, Chi square = 51.6, $p < 0.001$. The majority of parathyroid lesions (n = 37, 78.7%) had ES of 2 with speckled (n = 42, 89.3%) appearance, and none showed ES of 4. The diagnostic performance of speckled appearance on VTI, elasticity score and SWV measurements was 0.901, 0.724 and 0.797, respectively, to differentiate between parathyroid and thyroid lesions. **CONCLUSIONS:** Parathyroid lesions are softer than thyroid nodules. A shear wave velocity of 1.72 m/s can differentiate between parathyroid lesions and thyroid nodules.				
91.	Chandramohan, A., Thrower, A., Shah, N. and Mohamed, F. Radiological predictors of complete cytoreduction in 59 patients with peritoneal mesothelioma treated with cytoreductive surgery and hyperthermic intraperitoneal chemotherapy at a UK referral centre Br J Radiol; 2017, 90 (1079): 20170361 **Address:** 1 Visiting Faculty, Abdominal Imaging Unit, Department of Radiology, MD Anderson Cancer Center, Houston, TX, USA. 2 Associate professor of Radiology, **Christian Medical College, Vellore,** India. 3 Consultant Radiologist, Basingstoke and North Hampshire Hospital, Hampshire Hospitals NHS Foundation Trust, Basingstoke, England. 4 Consultant Surgeon, Basingstoke and North Hampshire Hospital, Hampshire Hospitals NHS Foundation Trust, Basingstoke, England. OBJECTIVE: To assess the imaging features of peritoneal mesothelioma and identify key anatomical sites that aid patient selection for complete cytoreduction. METHODS: Pre-operative imaging of 59 (32 males, 27 females) patients who underwent cytoreductive surgery with hyperthermic intraperitoneal chemotherapy	**INT**	**JUL TO DEC**	**RADIOLOGY**	**PMID:**28830230 **Impact Factor:**2.050 **H-Index:**92

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	(HIPEC) for histologically proven peritoneal mesothelioma [36 malignant peritoneal mesothelioma, 23 cystic mesothelioma were reviewed. Imaging findings were correlated with surgical outcome. Best imaging predictors of complete cytoreduction, n = 22 and major tumour debulking, n = 12 were assessed. RESULTS: Most patients (88.9%) had diffuse peritoneal disease with mean radiological peritoneal cancer index of 18 +/- 12 (range 2-39). Disease in the lesser omentum (n = 10), porta hepatis (n = 8), perigastric area (n = 5), mesentery (n = 25), small bowel (n = 17), hydronephrosis (n = 1), concurrent pleural disease (n = 2), lymph nodes (n = 1) and abdominal wall disease (n = 4) was considered unfavourable. While 78.9% of patients who underwent complete cytoreduction had no disease at unfavourable sites, 75% of those who underwent MTD did have disease at these sites. There was significant difference in the radiological peritoneal cancer index, severity of upper abdominal disease, small bowel and mesenteric involvement between patients who underwent complete cytoreduction and MTD for malignant peritoneal mesothelioma. Complete cytoreduction was not achieved in the presence of a rind of soft tissue around the small bowel (p = 0.016) and was unlikely in the presence of large volume upper abdominal disease (p = 0.06). CONCLUSION: Involvement of key anatomical sites such as small bowel serosa and large volume upper abdominal disease reduced the likelihood of achieving complete cytoreduction in patients with malignant peritoneal mesothelioma. Advances in knowledge: Demonstration of small bowel disease and large volume upper abdominal disease on imaging in patients with malignant peritoneal mesothelioma can be used to identify patients who may not benefit from cytoreductive surgery.				
92.	Chandramohan, A., Thrower, A., Smith, S. A., Shah, N. and Moran, B. "PAUSE": a method for communicating radiological extent of peritoneal malignancy Clin Radiol; 2017, 72 (11): 972-980 **Address:** Department of Radiology, Basingstoke and North Hampshire Hospital, Hampshire Hospitals NHS Foundation Trust, RG24 9NA, UK; Department of Radiology, **Christian Medical College, Vellore,** India. Electronic address: anuradhachandramohan@gmail.com. Department of Radiology, Basingstoke and North Hampshire Hospital, Hampshire Hospitals NHS Foundation Trust, RG24 9NA, UK. Department of Surgery, Basingstoke and North Hampshire Hospital, Hampshire Hospitals NHS Foundation Trust, RG24 9NA, UK.	**INT**	**JUL TO DEC**	**RADIOLOGY**	**PMID:**28778454 **Impact Factor:**2.478 **H-Index:**76

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Radiology reports of diffuse peritoneal disease should address key findings pertinent to the management of these patients. The reporting of radiology findings in patients with peritoneal malignancy is currently variable and poorly standardised. Using the acronym "PAUSE" we emphasise the key imaging features that a radiology report should include in a patient with peritoneal malignancy, focussing on the key elements determining feasibility and likely prognosis of surgery and potential benefits from cytoreductive surgery (CRS) and hyperthermic intraperitoneal chemotherapy (HIPEC). The term "PAUSE" incorporates the following: P, primary tumour and peritoneal carcinomatosis index (PCI) as estimated by imaging; A, ascites and abdominal wall involvement; U, unfavourable sites of involvement; S, small bowel and mesenteric disease; E, extra peritoneal metastases. Thus, "PAUSE" has the potential to standardise radiology reporting in this field.				
93.	Chang, Y. T., Coombs, G., Ling, T., Balaji, V., Rodrigues, C., Mikamo, H., Kim, M. J., Rajasekaram, D. G., Mendoza, M., Tan, T. Y., Kiratisin, P., Ni, Y., Barry, W., Xu, Y., Chen, Y. H. and Hsueh, P. R. Epidemiology and trends in the antibiotic susceptibilities of Gram-negative bacilli isolated from patients with intra-abdominal infections in the Asia-Pacific region, 2010-2013 Int J Antimicrob Agents; 2017, 49 (6): 734-739 **Address:** Division of Infectious Diseases, Department of Internal Medicine, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan; School of Medicine, Graduate Institute of Medicine, Sepsis Research Center, College of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan. Royal Perth Hospital, Perth, WA, Australia. Prince of Wales Hospital, Shatin, New Territories, Hong Kong, China. **Christian Medical College, Vellore,** India. P.D. Hinduja National Hospital & Medical Research Centre, Mumbai, India. Aichi Medical University Hospital, Nagakute, Japan. Korea University Anam Hospital, Seoul, South Korea. Hospital Sultanah Aminah Johin Bahru, Johor Bahru, Malaysia. Philippine General Hospital, Manila, Philippines. Changi General Hospital, Singapore. Siriraj Hospital, Bangkok-Noi, Thailand. Ruijin Hospital, Shanghai, China. Merck Sharp & Dohme, Kenilworth, NJ, USA. Peking Union Medical College Hospital, Beijing, China. Division of Infectious	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY**	**PMID:**28435019 **Impact Factor:** 4.307 **H-Index:**102

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Diseases, Department of Internal Medicine, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan; School of Medicine, Graduate Institute of Medicine, Sepsis Research Center, College of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan; Department of Biological Science and Technology, College of Biological Science and Technology, National Chiao Tung University, Hsinchu, Taiwan. Electronic **Address:** infchen@gmail.com. Departments of Laboratory Medicine and Internal Medicine, National Taiwan University Hospital, National Taiwan University College of Medicine, Taipei, Taiwan. Electronic **Address:** hsporen@ntu.edu.tw. This study was conducted to investigate the epidemiology and antimicrobial susceptibility patterns of Gram-negative bacilli (GNB) isolated from intra-abdominal infections (IAIs) in the Asia-Pacific region (APR) from 2010-2013. A total of 17 350 isolates were collected from 54 centres in 13 countries in the APR. The three most commonly isolated GNB were Escherichia coli (46.1%), Klebsiella pneumoniae (19.3%) and Pseudomonas aeruginosa (9.8%). Overall, the rates of extended-spectrum beta-lactamase (ESBL)-producing E. coli and K. pneumoniae were 38.2% and 24.3%, respectively, and they were highest in China (66.6% and 38.7%, respectively), Thailand (49.8% and 36.5%, respectively) and Vietnam (47.9% and 30.4%, respectively). During 2010-2013, the rates of ESBL-producing E. coli and K. pneumoniae isolates causing community-associated (CA) IAIs (collected <48 h after admission) were 26.0% and 13.5%, respectively, and those causing hospital-associated (HA) IAIs were 48.0% and 30.6%, respectively. Amikacin, ertapenem and imipenem were the most effective agents against ESBL-producing isolates. Piperacillin/tazobactam displayed good in vitro activity (91.4%) against CA ESBL-producing E. coli. For other commonly isolated Enterobacteriaceae, fluoroquinolones, cefepime and carbapenems exhibited better in vitro activities than third-generation cephalosporins. Amikacin possessed high in vitro activity against all GNB isolates (>80%) causing IAIs, except for Acinetobacter calcoaceticus-baumannii (ACB) complex (30.9% for HA-IAI isolates). All of the antimicrobial agents tested exhibited <45% in vitro activity against ACB complex. Antimicrobial resistance is a persistent threat in the APR and continuous monitoring of evolutionary trends in the susceptibility patterns of GNB causing IAIs in this region is mandatory.				
94.	Chaudhary, A. K., Mohapatra, R., Nagarajaram, H. A., Ranganath, P., Dalal, A., Dutta, A., Danda, S., Girisha, K. M. and Bashyam, M. D. The novel EDAR p.L397H missense mutation causes autosomal dominant	**INT**	**JAN TO JUN**	**CLINICAL GENETICS**	**PMID:**27168349 **Impact Factor:**3.528 **H-Index:**79

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	hypohidrotic ectodermal dysplasia J Eur Acad Dermatol Venereol; 2017, 31 (1): e17-e20 **Address:** Laboratory of Molecular Oncology, Hyderabad, India. Laboratory of Computational biology, Hyderabad, India. Diagnostics Division, Centre for DNA Fingerprinting and Diagnostics, Hyderabad, India. Nizam's Institute of Medical Sciences, Hyderabad, India. **Christian Medical College, Vellore,** India. Department of Medical Genetics, Kasturba Medical College, Manipal University, Manipal, India.				
95.	Chaudhary, K., Panda, A. and Devasia, A. Spontaneous irreducible urethral prolapse in a post-menopausal woman: a rare differential diagnosis of an intralabial mass Int Urogynecol J. 2017 Dec 2. doi: 10.1007/s00192-017-3522-1. [Epub ahead of print] **Address:** Department of Urology, **Christian Medical College, Vellore,** Tamil Nadu, India. kapil.doc19@gmail.com. Department of Urology, **Christian Medical College, Vellore,** Tamil Nadu, India.	**INT**	**JUL TO DEC**	**UROLOGY**	**PMID:**29197936 **Impact Factor:** 1.937 **H-Index:**76
96.	Chaudhary, Narendra, Magdalenal, R., Joseph, Leenu L., John, Rikki R. and Mathew, Leni G. Lenalidomide-Dexamethasone: A Promising Therapy For Langerhans Cell Histiocytosis Without Risk Organ Involvement Pediatric Blood & Cancer; 2017, 64 S3-S3	**INT**	**JUL TO DEC**	**DERMATOLOGY**	**NO PMID** **WOS:**000408942000007 **Impact Factor:** 2.513 **H-Index:**85
97.	Chavan, H., Christudoss, P., Mickey, K., Tessman, R., Ni, H. M., Swerdlow, R. and Krishnamurthy, P. Arsenite Effects on Mitochondrial Bioenergetics in Human and Mouse Primary Hepatocytes Follow a Nonlinear Dose Response Oxid Med Cell Longev; 2017, 2017 9251303 **Address:** Department of Pharmacology, Toxicology and Therapeutics, University of Kansas Medical Center, Kansas City, KS 66160, USA. Department of Pharmacology, Toxicology and Therapeutics, University of Kansas Medical Center, Kansas City, KS	**INT**	**JAN TO JUN**	**CLINICAL BIOCHEMISTRY**	**PMID:**28163822 **WOS:**000393986100001 **Impact Factor:** 4.593 **H-Index:**45

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	66160, USA; Department of Clinical Biochemistry, **Christian Medical College, Vellore** 632004, India. Department of Anatomy and Cell Biology, University of Kansas Medical Center, Kansas City, KS 66160, USA. Arsenite is a known carcinogen and its exposure has been implicated in a variety of noncarcinogenic health concerns. Increased oxidative stress is thought to be the primary cause of arsenite toxicity and the toxic effect is thought to be linear with detrimental effects reported at all concentrations of arsenite. But the paradigm of linear dose response in arsenite toxicity is shifting. In the present study we demonstrate that arsenite effects on mitochondrial respiration in primary hepatocytes follow a nonlinear dose response. In vitro exposure of primary hepatocytes to an environmentally relevant, moderate level of arsenite results in increased oxidant production that appears to arise from changes in the expression and activity of respiratory Complex I of the mitochondrial proton circuit. In primary hepatocytes the excess oxidant production appears to elicit adaptive responses that promote resistance to oxidative stress and a propensity to increased proliferation. Taken together, these results suggest a nonlinear dose-response characteristic of arsenite with low-dose arsenite promoting adaptive responses in a process known as mitohormesis, with transient increase in ROS levels acting as transducers of arsenite-induced mitohormesis.				
98.	Checkley, William, Mouksassi, Samer, Carreon, J. Daniel, Mccormick, Benjamin J., Mahfuz, Mustafa, Gottlieb, Michael, Knobler, Stacey L., Lang, Dennis R., Miller, Mark A., Bhutta, Zulfiqar A., Caulfield, Laura, Guerrant, Richard L., Houpt, Eric, Kosek, Margaret N., Murray-Kolb, Laura E., Petri, William A., Jr., Seidman, Jessica C., Bessong, Pascal, Haque, Rashidul, John, Sushil, **Kang, Gangandeep**, Lima, Aldo A. M., Mduma, Estomih R., Oria, Reinaldo, Shrestha, Sanjaya Kumar, Svensen, Erling, Zaidi, Anita K. M., Abreu, Claudia B., Ahmed, Imran, Ali, Asad, Ambikapathi, Ramya, Bayyo, Eliwaza, Bose, Anuradha, Chandyo, Ram Krishna, Dillingham, Rebecca, Platts-Mills, James, Ahmed, Tahmeed and Mal-Ed Network, Investigators **[MAL-ED Network Investigators].** Childhood stunting in relation to the pre- and postnatal environment during the first 2 years of life: The MAL-ED longitudinal birth cohort study. PLoS Med. 2017 Oct 25;14(10):e1002408. doi: 10.1371/journal.pmed.1002408. eCollection 2017 Oct. BACKGROUND: Stunting is the most prevalent manifestation of childhood	**INT**	**JUL TO DEC**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**29069076 **PMCID:PMC**5656304 **WOS:**000414064100012 **Impact Factor:** 11.862 **H-Index:**172

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	malnutrition. To characterize factors that contribute to stunting in resource-poor settings, we studied a priori selected biological and social factors collected longitudinally in a cohort of newborns. METHODS AND FINDINGS: We enrolled 1,868 children across 7 resource-poor settings in Bangladesh, Brazil, India, Nepal, Peru, South Africa, and Tanzania shortly after birth and followed them for 24 months between 2 November 2009 and 28 February 2014. We collected longitudinal anthropometry, sociodemographic factors, maternal-reported illnesses, and antibiotic use; child feeding practices; dietary intake starting at 9 months; and longitudinal blood, urine, and stool samples to investigate non-diarrheal enteropathogens, micronutrients, gut inflammation and permeability, and systemic inflammation. We categorized length-for-age Z-scores into 3 groups (not stunted, ≥-1; at risk, <-1 to -2; and stunted, <-2), and used multivariable ordinal logistic regression to model the cumulative odds of being in a lower length-for-age category (at risk or stunted). A total of 1,197 children with complete longitudinal data were available for analysis. The prevalence of having a length-for-age Z-score below -1 increased from 43% (range 37%-47% across sites) shortly after birth (mean 7.7 days post-delivery, range 0 to 17 days) to 74% (16%-96%) at 24 months. The prevalence of stunting increased 3-fold during this same time period. Factors that contributed to the odds of being in a lower length-for-age category at 24 months were lower enrollment weight-for-age (interquartile cumulative odds ratio = 1.82, 95% CI 1.49-2.23), shorter maternal height (2.38, 1.89-3.01), higher number of enteropathogens in non-diarrheal stools (1.36, 1.07-1.73), lower socioeconomic status (1.75, 1.20-2.55), and lower percent of energy from protein (1.39, 1.13-1.72). Site-specific analyses suggest that reported associations were similar across settings. While loss to follow-up and missing data are inevitable, some study sites had greater loss to follow-up and more missing data than others, which may limit the generalizability of the indings. CONCLUSIONS: Neonatal and maternal factors were early determinants of lower length-for-age, and their contribution remained important throughout the first 24 months of life, whereas the average number of enteropathogens in non-diarrheal stools, socioeconomic status, and dietary intake became increasingly important contributors by 24 months relative to neonatal and maternal factors. DOI: 10.1371/journal.pmed.1002408				
99.	Chen, Yingying, Lu, Jiaju, Chen, Bangrui, Wang, Shuo, Rana, Deepti, Ramalingam, Murugan, Wei, Yueteng, Sun, Xiaodan, Zhao, Lingyun and Wang, Xiumei	**INT**	**JUL TO DEC**	**CENTRE FOR STEM CELL**	**NO PMID WOS:**000418448

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	PFS-Functionalized Self-Assembling Peptide Hydrogel for the Maintenance of Human Adipose Stem Cell In Vitro Journal of Biomaterials and Tissue Engineering; 2017, 7 (10): 943-951 Human adipose stem cell (hASC) has shown a great potential in tissue engineering and regenerative medicine for facilitating tissue regeneration, especially ischemic tissue repair. Although it provides an abundant and easily accessible cell source for stem cell therapy, the loss of hASC's multipotency during cell culture in vitro is a critical problem for clinical applications. In this study, a functionalized self-assembling peptide (SAP) was obtained by adding a bone marrow homing peptide, PFS (PFSSTKT), to the C-terminus of SAP RADA (AcN-(RADA)(4)-CONH2). Our results showed that PFS-functionalized self-assembling peptide hydrogel promoted cell survival, attachment and proliferation. In addition, the hASCs seeded on the surfaces of SAP hydrogels migrated into the hydrogel to a depth of several hundred micrometers. The migration of hASCs into RADA was significantly greater than cells seeded on RAD/PFS, indicating the functional motif PFS may promote cell homing and reduce cell dispersion. Importantly, for hASCs cultured in RADA and RAD/PFS hydrogels, the total amount of secreted angiogenic growth factors VEGF and HGF were maintained at high levels for 2 weeks. The levels of VEGF and HGF may be elevated due to rapid increases in cell numbers and enhanced secretion by these cells in the RADA and RAP/PFS hydrogels in comparison to cells cultured on tissue culture plate.			**RESEARCH**	300005 **Impact Factor:** 1.383 **H-Index:**15
100.	Cherian, K. E., Abraham, D. T., Paul, T. V. and Thomas, N. Descended right superior parathyroid adenoma mimicking as inferior adenoma in primary hyperparathyroidism BMJ Case Rep; 2017, 2017 **Address:** Department of Endocrinology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Endocrine Surgery, **Christian Medical College, Vellore,** Tamil Nadu, India. Endocrinology Department, **Christian Medical College, Vellore,** Tamil Nadu, India.	**INT**	**JUL TO DEC**	**ENDOCRINOLOGY, ENDOCRINE SURGERY**	**PMID:**28775111 **Impact Factor:**NA **H-Index:**11
101.	Cherian, K. E., Kapoor, N. and Paul, T. V. Glucocorticoid-induced Osteoporosis Indian J Endocrinol Metab; 2017, 21 (5): 652-654	**NAT**	**JUL TO DEC**	**ENDOCRINOLOGY**	**PMID:**28989868 **PMCID:**5628530 **Impact Factor:**NA

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College, Vellore,** Tamil Nadu, India.				**H-Index:**7
102.	Cherian, K. E., Kapoor, N., Mathews, S. S. and Paul, T. V. Endocrine Glands and Hearing: Auditory Manifestations of Various Endocrine and Metabolic Conditions Indian J Endocrinol Metab; 2017, 21 (3): 464-469 **Address:** Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of ENT, **Christian Medical College, Vellore,** Tamil Nadu, India. The aetiology of hearing loss in humans is multifactorial. Besides genetic, environmental and infectious causes, several endocrine and metabolic abnormalities are associated with varying degrees of hearing impairment. The pattern of hearing loss may be conductive, sensori-neural or mixed. The neurophysiology of hearing as well as the anatomical structure of the auditory system may be influenced by changes in the hormonal and metabolic milieu. Optimal management of these conditions requires the integrated efforts of the otolaryngologist and the endocrinologist. The presence of hearing loss especially in the young age group should prompt the clinician to explore the possibility of an associated endocrine or metabolic disorder for timely referral and early initiation of treatment.	**NAT**	**JAN TO JUN**	**ENDOCRINOLOGY, ENT 5**	**PMID:**28553606 **PMCID:**PMC5434734 **Impact Factor:**NA **H-Index:**7
103.	Cherian, K. E., Kapoor, N., Shetty, S., Naik, D., Thomas, N. and Paul, T. V. Evaluation of Different Screening Tools for Predicting Femoral Neck Osteoporosis in Rural South Indian Postmenopausal Women J Clin Densitom; 2017, **Address:** Department of Endocrinology, **Christian Medical College, Vellore,** India. Department of Endocrinology, **Christian Medical College, Vellore,** India. Electronic address: thomasvpaul@yahoo.com. The measurement of bone mineral density by dual-energy X-ray absorptiometry scan is the "gold standard" for the diagnosis of osteoporosis, which has limited availability in many parts of India. This study was done to assess the diagnostic	**INT**	**JUL TO DEC**	**ENDOCRINOLOGY**	**PMID:**28958825 **Impact Factor:** 3.240 **H-Index:**55

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	performance of 6 internationally validated tools (Simple Calculated Osteoporosis Risk Estimation [SCORE], age, bulk, one or never estrogen [ABONE], Osteoporosis Risk Assessment Instrument [ORAI] and Osteoporosis Self-Assessment Tool for Asians [OSTA], Fracture Risk Assessment Tool [FRAX(R)], and calcaneal quantitative ultrasound [QUS]) for the diagnosis of osteoporosis at the femoral neck (FN). This was a cross-sectional study conducted in 2108 ambulatory South Indian rural postmenopausal women who were assessed with SCORE, ABONE, ORAI, OSTA, and FRAX(R) tools. QUS was performed in 850 subjects. Bone mineral density was estimated by dual-energy X-ray absorptiometry scan at the FN, and sensitivity and specificity were calculated for all tools for predicting FN osteoporosis. The receiver operating characteristic curve was constructed for each tool and the area under the curve (AUC) was calculated. FN osteoporosis was seen in 27%. The sensitivities of SCORE, ABONE, OSTA, ORAI, FRAX(R), and QUS were 91.3%, 91.0%, 88.5%, 81.0%, 72.7%, and 81.9%, and the specificities were 36.0%, 33.5%, 41.7%, 52.0%, 60.5%, and 50.3%, respectively, for the FN osteoporosis. When the receiver operating characteristics were constructed, the AUC was good only for SCORE (0.806), and the performance of the rest was under fair category (0.713-0.766). In our large cohort of rural postmenopausal women, the SCORE screening tool was found to be useful with good sensitivity and good AUC for predicting FN osteoporosis. Thus, this tool may be used in resource-limited countries to screen the population at risk and to enable treating physicians to make appropriate management decisions.				
104.	Cherian, R. M., Jeba, J., Mukhopadhyay, S. and Backianathan, S. Unusual sites of metastases of carcinoma cervix BMJ Case Rep; 2017, 2017 **Address:** Department of Radiotherapy, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Pathology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. We present a case of metastatic squamous cell carcinoma cervix with solitary bone metastases to the right tibia and multiple cutaneous metastases. A woman aged 52 years with cancer of the cervix and lung metastases, after 21 months of initial diagnosis and palliative chemotherapy presented with pain in the right knee and	**INT**	**JAN TO JUN**	**RADIOTHERAPY, PATHOLOGY**	**PMID:**28174190 **Impact Factor:**NA **H-Index:**11

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	multiple nodular skin lesions. Bone scintigraphy revealed intense increased tracer activity in the proximal and mid shaft of the right tibia. Biopsy from the tibial lesion confirmed metastatic squamous cell carcinoma. The presentation, diagnosis and management of this rare case are discussed.				
105.	Chidambaram, M., Parija, S. C., Toi, P. C., Mandal, J., Sankaramoorthy, D., George, S., Natarajan, M. and Padukone, S. Evaluation of the utility of conventional polymerase chain reaction for detection and species differentiation in human hookworm infections Trop Parasitol; 2017, 7 (2): 111-116 **Address:** Department of Microbiology, Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry, Tamil Nadu, India. Department of Pathology, Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry, Tamil Nadu, India. Department of Gastrointestinal Science, Wellcome Trust Research Laboratory, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Background: Human hookworm infection is caused mainly by Necator americanus and Ancylostoma duodenale. Among the zoonotic hookworm species, only Ancylostoma ceylanicum causes potent human infections where dogs and cats act as reservoir of infection. Hence, species differentiation is imperative because the eradication of both anthroponotic and zoonotic hookworm depends on the concurrent human and animal health programs, hygienic practices, and mass drug administration for humans and dogs. Objective: This study was performed to evaluate the utility of polymerase chain reaction (PCR) for detection of hookworm infections. Materials and Methods: A total of 209 stool samples were collected and subjected to stool microscopy, Kato-Katz method to identify the intensity of the infection, coproculture for L3 larval identification and species differentiation and semi-nested PCR with sequencing. Results: The prevalence of hookworm was estimated as 7.6%. Highest hookworm prevalence was seen in 20-30 years of age group. Majority of the infections were mild intensity infections. Sensitivity of stool microscopy was found to be 81.2% and the specificity was 100%. Sensitivity of Kato-Katz method was 87.5% and specificity was 100%. True positivity by agar plate culture was 83.3% and false positivity rate was 16.6%. Conclusion: Stool microscopy is the major mode of detection, but it has a higher false negative rate. Coproculture is time-consuming and needs the expertise to differentiate the species. On the other hand, PCR is known to be a sensitive, specific, and a reliable	**INT**	**JUL TO DEC**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**29114490 **PMCID:**5652048 **Impact Factor:**NA **H-Index:**NA

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	investigative tool which can help in diagnosis as well as in species differentiation				
106.	Choudhury, A., Jindal, A., Maiwall, R., Sharma, M. K., Sharma, B. C., Pamecha, V., Mahtab, M., Rahman, S., Chawla, Y. K., Taneja, S., Tan, S. S., Devarbhavi, H., Duan, Z., Yu, C., Ning, Q., Jia, J. D., Amarapurkar, D., Eapen, C. E., Goel, A., Hamid, S. S., Butt, A. S., Jafri, W., Kim, D. J., Ghazinian, H., Lee, G. H., Sood, A., Lesmana, L. A., Abbas, Z., Shiha, G., Payawal, D. A., Dokmeci, A. K., Sollano, J. D., Carpio, G., Lau, G. K., Karim, F., Rao, P. N., Moreau, R., Jain, P., Bhatia, P., Kumar, G. and Sarin, S. K. Liver failure determines the outcome in patients of acute-on-chronic liver failure (ACLF): comparison of APASL ACLF research consortium (AARC) and CLIF-SOFA models Hepatol Int; 2017, 11 (5): 461-471 **Address:** Department of Hepatology and Transplant, Institute of Liver and Biliary Sciences (ILBS), New Delhi, 110 070, India. Department of Hepatology, Institute of Liver and Biliary Sciences (ILBS), New Delhi, 110 070, India. Department of Hepatology, Bangabandhu Sheikh Mujib Medical University, Dhaka, Bangladesh. Department of Hepatology, Post Graduate Institute of Medical Education and Research, Chandigarh, India. Department of Gastroenterology and Hepatology, Selayang Hospital, Kepong, Malaysia. Department of Gastroenterology and Hepatology, St John Medical College, Bangalore, India. Beijing Youan Hospital, Capital Medical University, Beijing, China. Department of Infectious Disease, Tongji Medical College, Tongji Hospital, Huazhong University of Science and Technology, Wuhan, China. Liver Research Center, Beijing Friendship Hospital, Capital Medical University, Beijing, China. Department of Gastroenterology and Hepatology, Bombay Hospital and Medical Research Centre, Mumbai, India. Department of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India. Department of Medicine, Aga Khan University Hospital, Karachi, Pakistan. Hallym University Chuncheon Sacred Heart Hospital, Center for Liver and Digestive Diseases, Chuncheon, Gangwon-Do, Republic of Korea. Department of Hepatology, Nork Clinical Hospital of Infectious Diseases, Yerevan,	**INT**	**JUL TO DEC**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28856540 **Impact Factor:** 2.164 **H-Index:**34

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Armenia. Department of Gastroenterology and Hepatology, National University Health System, Singapore, Singapore. Department of Gastroenterology, Dayanand Medical College, Ludhiana, India. Division of Hepatology, University of Indonesia, Jakarta, Indonesia. Department of Hepatogastroenterology, Sindh Institute of Urology and Transplantation, Karachi, Pakistan. Department of Internal Medicine, Egyptian Liver Research Institute and Hospital, Cairo, Egypt. Department of Hepatology, Cardinal Santos Medical Center, Manila, Philippines. Department of Gastroenterology, Ankara University School of Medicine, Ankara, Turkey. Cardinal Santos Medical Center, Metro Manila, Philippines. The Institute of Translational Hepatology, Beijing, China. Sir Salimur Rehman Medical College, Mitford Hospital, Dhaka, Bangladesh. Asian Institute of Gastroenterology, Hyderabad, India. Inserm, U1149, Centre de recherche sur l'Inflammation (CRI), UMR_S 1149, Labex INFLAMEX, Universite Paris Diderot Paris 7, Paris, France. Department of Clinical Research, Institute of Liver and Biliary Sciences (ILBS), New Delhi, 110 070, India. Department of Hepatology and Transplant, Institute of Liver and Biliary Sciences (ILBS), New Delhi, 110 070, India. shivsarin@gmail.com. Department of Hepatology, Institute of Liver and Biliary Sciences (ILBS), New Delhi, 110 070, India. shivsarin@gmail.com. BACKGROUND AND AIMS: Acute-on-chronic liver failure (ACLF) is a progressive disease associated with rapid clinical worsening and high mortality. Early prediction of mortality and intervention can improve patient outcomes. We aimed to develop a dynamic prognostic model and compare it with the existing models. METHODS: A total of 1402 ACLF patients, enrolled in the APASL-ACLF Research Consortium (AARC) with 90-day follow-up, were analyzed. An ACLF score was developed in a derivation cohort (n = 480) and was validated (n = 922). RESULTS: The overall survival of ACLF patients at 28 days was 51.7%, with a median of 26.3 days. Five baseline variables, total bilirubin, creatinine, serum lactate, INR and hepatic encephalopathy, were found to be independent predictors of mortality, with AUROC in derivation and validation cohorts being 0.80 and 0.78, respectively. AARC-ACLF score (range 5-15) was found to be superior to MELD and CLIF SOFA scores in				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	predicting mortality with an AUROC of 0.80. The point scores were categorized into grades of liver failure (Gr I: 5-7; II: 8-10; and III: 11-15 points) with 28-day cumulative mortalities of 12.7, 44.5 and 85.9%, respectively. The mortality risk could be dynamically calculated as, with each unit increase in AARC-ACLF score above 10, the risk increased by 20%. A score of >/=11 at baseline or persisting in the first week was often seen among nonsurvivors (p = 0.001). CONCLUSIONS: The AARC-ACLF score is easy to use, dynamic and reliable, and superior to the existing prediction models. It can reliably predict the need for interventions, such as liver transplant, within the first week.				
107.	Choudhury, A., Kumar, M., Sharma, B. C., Maiwall, R., Pamecha, V., Moreau, R., Chawla, Y. K., Duseja, A., Mahtab, M., Rahman, S., Hamid, S. S., Butt, A. S., Jafri, W., Tan, S. S., Devarbhavi, H., Amarapurkar, D., Ning, Q., **Eapen, C. E**., Goel, A., Kim, D. J., Ghazinian, H., Shiha, G., Lee, G. H., Abbas, Z., Payawal, D. A., Dokmeci, A. K., Yuen, M. F., Lesmana, L. A., Sood, A., Chan, A., Lau, G. K., Jia, J. I., Duan, Z., Chen, Y., Yokosuka, O., Jain, P., Bhadoria, A. S., Kumar, G. and Sarin, S. K. Systemic Inflammatory Response Syndrome in Acute on Chronic Liver Failure-Relevance of 'Golden Window'- a Prospective Study J Gastroenterol Hepatol; 2017, **Address:** Department of Hepatology and Transplant, Institute of Liver and Biliary Sciences, New Delhi, India. Department of Hepatobiliary Surgery and liver transplantation, Institute of Liver and Biliary Sciences, New Delhi, India. Inserm, U1149, Centre de recherche sur l'Inflammation (CRI), Paris; UMR_S 1149, Labex INFLAMEX, Universite Paris Diderot Paris 7, Paris, France. Department of Hepatology, Post Graduate Institute of Medical Education and Research, Chandigarh, India. Department of Hepatology, Bangabandhu Sheikh Mujib Medical University, Dhaka, Bangladesh. Department of Medicine, Aga Khan University Hospital, Karachi, Pakistan. Department of Gastroenterology and Hepatology, Selayang Hospital, Kepong, Malaysia. Department of Gastroenterology and Hepatology, St John Medical College, Bangalore, India. Department of Gastroenterology and Hepatology, Bombay Hospital and Medical Research Centre, Mumbai, India. Department of Infectious Disease, Tongji Hospital, Tongji Medical College, Huazhong University of Science	**INT**	**JAN TO JUN**	**GASTROINTESTINAL SCIENCES**	**PMID:**28374414 **Impact Factor:** 3.452 **H-Index:**108

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	and Technology, Wuhan, China. Department of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India. Center for Liver and Digestive Diseases, Hallym University Chuncheon Sacred Heart Hospital, Chuncheon, Gangwon-Do, Republic of Korea. Department of Hepatology, Nork Clinical Hospital of Infectious Diseases, Yerevan, Armenia. Department of Internal Medicine, Egyptian Liver Research Institute and Hospital, Cairo, Egypt. Department of Gastroenterology and Hepatology, National University Health System, Singapore, Singapore. Department of Hepatogastroenterology, Sindh Institute of Urology and Transplantation, Karachi, Pakistan. Department of Hepatology, Cardinal Santos Medical Center, Manila, Philippines. Department of Gastroenterology, Ankara University School of Medicine, Ankara, Turkey. Department of Medicine, The University of Hong Kong, Hong Kong, China. Division of Hepatology, University of Indonesia, Jakarta, Indonesia. Department of Gastroenterology, Dayanand Medical College, Ludhiana, India. Division of Hepatobiliary and Pancreatic Surgery, and Liver Transplantation, Department of Surgery, The University of Hong Kong, Hong Kong, China. The Institute of Translational Hepatology, Beijing, China. Liver Research Center, Beijing Friendship Hospital, Capital Medical University, Beijing, China. Beijing Youan Hospital, Capital Medical University, Beijing, China. Department of Gastroenterology and Nephrology, Graduate School of Medicine, Chiba University, Chiba, Japan. **BACKGROUND:** SIRS is an early marker of sepsis and ongoing inflammationand has been reported in large proportion of ACLF patients. Whether sepsis is the cause or the result of liver failure is unclear and is vital to know. To address this, we investigated the course and outcome of ACLF patients without SIRS/sepsis. **METHODS:** Consecutive ACLF patients were monitored for the development of SIRS/sepsis and associated complications and followed till 90 days, liver transplant or death. **RESULTS:** Of 561 patients, 201(35.8%) had no SIRS and 360(64.2%) had SIRS with or without infection. New onset SIRS and sepsis developed in 74.6%and 8% respectively in a median 7(range 4-15) days; at a rate of 11% per day. The cumulative incidence of new SIRS was 29%, 92.8% and 100 % by day 4,7 and 15. Liver failure i.e., bilirubin >12 mg/dl, [(OR = 2.5(95%CI = 1.05-6.19), p = 0.04] at day 0 and 4, renal failure at day 4 [(OR = 6.74(95%CI = 1.50-13.29), p = 0.01] independently predicted new onset SIRS. Absence of SIRS in first week was associated with reduced incidence of organ failure (20% vs.39.4%,p = 0.003), as was the 28 day (17.6%vs.36%,p = 0.02) and 90 day (27.5%vs.51%,p = 0.002)				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	mortality. The 90 day mortality was 61.6% in the total cohort, and that for those having no SIRS and SIRS at presentation were 42.8% and 65% respectively ($p < 0.001$). **CONCLUSIONS:** Liver failure predicts the development of SIRS. New onset SIRS in first week is an important determinant of early sepsis, organ failure and survival. Prompt interventions in this 'Golden window' prior to development of sepsis, may improve outcome of ACLF.				
108.	Choudhury1 , M.K. Sharma1 , B.C. Sharma1 , R. Maiwal1 , V. Pamecha2 , R. Moreau3 , Y.K. Chawla4 , A. Duseja4 , M.A. Mahtab5 , S. Rahman5 , S.S. Hamid6 , A.S. Butt6 , W. Jafri6 , S.S. Tan7 , H. Devarbhavi8 , D. Amarapurkar9 , Q. Ning10, **C.E. Eapen11**, A. Goel11, D.J. Kim12, H. Ghazinyan13, G. Shiha14, G.H. Lee15, Z. Abbas16, D.A. Payawal17, A.K. Dokmeci18, M.F. Yuen19, L.A. Leshmana20, A. Sood21, A. Chan22, G.K. Lau23, J.D. Jia24, Z. Duan25, C. Yu25, O. Yokosuka26, P.N. Rao27, S. Shah28, V.G.M. Prasad29, M.K. Sahu30, A. Shukla31, J. Hu32, S. Treeprasertsuk33, V. Arora1 , K. Mishra1 , P. Bhatia1 , P. Jain1 , G. Kumar1 , S.K. Sarin1 and Apasl ACLF working party1 . GS-013 Etiology, time frame and spectrum of decompensation in 6236 patients of cirrhosis liver across Asia: a multinational study from APASL ACLF Research Consortium (AARC) Journal of Hepatology; 2017, 66 (1): S86-S87 **Author Information:** 1 Department of Hepatology and Transplant; 2 Department of Hepatobiliary Surgery and Liver Transplantation, Institute of Liver and Biliary Sciences, New Delhi, India; 3 Centre de recherche sur l'Inflammation(CRI), Paris, France; 4 Department of Hepatology, Post Graduate Institute of Medical Education and Research, Chandigarh, India; 5 Department Of Hepatology, Bangabandhu Sheikh Mujib Medical University, Dhaka, Bangladesh; 6 Department of Medicine, Aga Khan University Hospital, Karachi, Pakistan; 7 Department of Gastroenterology and Hepatology, Selayang Hospital, Kepong, Malaysia; 8 Department of Gastroenterology and Hepatology, St. John Medical College, Banglore; 9 Department of Gastroenterology and Hepatology, Bombay Hospital and Medical Research, Mumbai, India;	**INT**	**JUL TO DEC**	**GASTEROINTESTINAL SCIENCES**	**NO PMID** **WOS:**000401056600175 **Impact Factor:**12.486 **H-Index:**195

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	10Department of Infectious Disease, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China; **11Department of Gasterointestinal Sciences, Christian Medical College, Vellore, India;** 12Center for Liver and Digestive Disease, Hallym University Chuncheon Sacred Heart Hospital, Gangwon-Do, Korea, South; 13Department of Hepatology, Nork Clinical Hospital of Infectious Diseases, Yerevan, Armenia; 14Department of Internal Medicine, Egyptian Liver Research Institute and Hospital, Cairo, Egypt; 15Department of Gasteroenterology and Hepatology, National University Health System, Singapore, Singapore; 16Department of Hepatogastroenterology, Sindh Institute of Urology and Transplantation, Karachi, Pakistan; 17Department of Hepatology, Cardinal Santos Medical Center, Manila, Philippines; 18Department of Gastroenetrology, Ankara University School of Medicine, Ankara, Turkey; 19Department of Medicine, The University of Hong Kong, Hong Kong, China; 20Division of Hepatology, University of Indonesia, Jakarta, Indonesia; 21Department of Gastroenterology, Dayanand Medical College, Ludhiana, India; 22Division of Hepatobiliary and Pancreatic Surgery and Liver Transplantation, Department of Surgery, The University of Hong Kong, Hong Kong; 23The Institute of Translational Hepatology; 24Liver Research Center, Beijing Friendship Hospital, Capital Meical University; 25Beijing Youan Hospital, Capital Medical University, Beijing, China; 26Department of Gastroenterology and Nephrology, Graduate School of Medicine, Chiba University, Chiba, Japan; 27Asian Institute of Gastroenterology, Hyderabad; 28Department of Hepatology, Global Hospital, Mumbai; 29V G M Hospital, Coimbatore; 30Institute of Medical Sciences and SUM Hospital, Bhubneshwar; 31KEM Hospital and Seth G S Medical College, Mumbai, India; 32Millitary Hospital, Beijing, China; 33Division of Gastroenterology, Department of Internal Medicine, Chulalongkorn University, Bangkok, Thailand E-mail: aarc@aclf.in				
109.	Clark, A., Black, R., Tate, J., Roose, A., Kotloff, K., Lam, D., Blackwelder, W., Parashar, U., Lanata, C., Kang, G., Troeger, C., Platts-Mills, J., Mokdad, A., Sanderson, C., Lamberti, L., Levine, M., Santosham, M. and Steele, D. Estimating global, regional and national rotavirus deaths in children aged <5	**INT**	**JUL TO DEC**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28892480 **PMCID:**5593200 **Impact Factor:** 2.806

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	years: Current approaches, new analyses and proposed improvements PLoS One; 2017, 12 (9): e0183392 **Address:** London School of Hygiene and Tropical Medicine, London, United Kingdom. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States of America. Centers for Disease Control and Prevention, Atlanta, Georgia, United States of America. University of Maryland School of Medicine, Baltimore, Maryland, United States of America. Instituto de Investigacion Nutricional, Lima, Peru. Vanderbilt University, Nashville, Tennessee, United States of America. **Christian Medical College, Vellore,** India. Institute for Health Metrics and Evaluation, Seattle, Washington, United States of America. University of Virginia, Charlottesville, Virginia, United States of America. Bill & Melinda Gates Foundation, Seattle, Washington, United States of America. BACKGROUND: Rotavirus is a leading cause of diarrhoeal mortality in children but there is considerable disagreement about how many deaths occur each year. METHODS AND FINDINGS: We compared CHERG, GBD and WHO/CDC estimates of age under 5 years (U5) rotavirus deaths at the global, regional and national level using a standard year (2013) and standard list of 186 countries. The global estimates were 157,398 (CHERG), 122,322 (GBD) and 215,757 (WHO/CDC). The three groups used different methods: (i) to select data points for rotavirus-positive proportions; (ii) to extrapolate data points to individual countries; (iii) to account for rotavirus vaccine coverage; (iv) to convert rotavirus-positive proportions to rotavirus attributable fractions; and (v) to calculate uncertainty ranges. We conducted new analyses to inform future estimates. We found that acute watery diarrhoea was associated with 87% (95% CI 83-90%) of U5 diarrhoea hospitalisations based on data from 84 hospital sites in 9 countries, and 65% (95% CI 57-74%) of U5 diarrhoea deaths based on verbal autopsy reports from 9 country sites. We reanalysed data from the Global Enteric Multicenter Study (GEMS) and found 44% (55% in Asia, and 32% in Africa) rotavirus-positivity among U5 acute watery diarrhoea hospitalisations, and 28% rotavirus-positivity among U5 acute watery diarrhoea deaths. 97% (95% CI 95-98%) of the U5				**H-Index:**218

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	diarrhoea hospitalisations that tested positive for rotavirus were entirely attributable to rotavirus. For all clinical syndromes combined the rotavirus attributable fraction was 34% (95% CI 31-36%). This increased by a factor of 1.08 (95% CI 1.02-1.14) when the GEMS results were reanalysed using a more sensitive molecular test. CONCLUSIONS: We developed consensus on seven proposals for improving the quality and transparency of future rotavirus mortality estimates.				
110.	Coffeng, L. E., Truscott, J. E., Farrell, S. H., Turner, H. C., Sarkar, R., Kang, G., De Vlas, S. J. and Anderson, R. M. Comparison and validation of two mathematical models for the impact of mass drug administration on Ascaris lumbricoides and hookworm infection Epidemics; 2017, 18 38-47 **Address:** Department of Public Health, Erasmus MC, University Medical Center Rotterdam, Rotterdam, The Netherlands. Electronic **Address:** l.coffeng@erasmusmc.nl. London Centre for Neglected Tropical Disease Research, Department of Infectious Disease Epidemiology, St. Mary's Campus, Imperial College London, London WC2 1 PG, United Kingdom. Division of Gastrointestinal Sciences, **Christian Medical College, Vellore** 632004, Tamil Nadu, India. Department of Public Health, Erasmus MC, University Medical Center Rotterdam, Rotterdam, The Netherlands. The predictions of two mathematical models of the transmission dynamics of Ascaris lumbricoides and hookworm infection and the impact of mass drug administration (MDA) are compared, using data from India. One model has an age structured partial differential equation (PDE) deterministic framework for the distribution of parasite numbers per host and sexual mating. The second model is an individual-based stochastic model. Baseline data acquired prior to treatment are used to estimate key transmission parameters, and forward projections are made, given the known MDA population coverage. Predictions are compared with observed post-treatment epidemiological patterns. The two models could equally well predict the short-term impact of deworming on A. lumbricoides and hookworm infection levels, despite being fitted to different subsets and/or summary statistics of the data. As such, the outcomes give confidence in their use as aids to policy	**INT**	**JAN TO JUN**	**GASTROINTESTINAL SCIENCES**	**PMID:**28279454 **Impact Factor:** 2.290 **H-Index:**23

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	formulation for the use of PCT to control A. lumbricoides and hookworm infection. The models further largely agree in a qualitative sense on the added benefit of semi-annual vs. annual deworming and targeting of the entire population vs. only children, as well as the potential for interruption of transmission. Further, this study also illustrates that long-term predictions are sensitive to modelling assumptions about which age groups contribute most to transmission, which depends on human demography and age-patterns in exposure and contribution to the environmental reservoir of infection, the latter being notoriously difficult to empirically quantify.				
111.	Collaborators: Dandona L, Dandona R, Kumar GA, Shukla DK, Paul VK, Balakrishnan K, Prabhakaran D, Tandon N, Salvi S, Dash AP, Nandakumar A, Patel V, Agarwal SK, Gupta PC, Dhaliwal RS, Mathur P, Laxmaiah A, Dhillon PK, Dey S, Mathur MR, Afshin A, Fitzmaurice C, Gakidou E, Gething P, Hay SI, Kassebaum NJ, Kyu H, Lim SS, Naghavi M, Roth GA, Stanaway JD, Whiteford H, Chadha VK, Khaparde SD, Rao R, Rade K, Dewan P, Furtado M, Dutta E, Varghese CM, Mehrotra R, Jambulingam P, Kaur T, Sharma M, Singh S, Arora R, Rasaily R, Anjana RM, Mohan V, Agrawal A, Chopra A, Mathew AJ, Bhardwaj D, Muraleedharan P, Mutreja P, Bienhoff K, Glenn S, Abdulkader RS, Aggarwal AN, Aggarwal R, Albert S, Ambekar A, Arora M, Bachani D, Bavdekar A, Beig G, Bhansali A, Bhargava A, Bhatia E, Camara B, **Christopher DJ,** Das SK, Dave PV, Dey S, Ghoshal AG, Gopalakrishnan N, Guleria R, Gupta R, Gupta SS, Gupta T, Gupte MD, Gururaj G, Harikrishnan S, Iyer V, Jain SK, Jeemon P, Joshua V, Kant R, Kar A, Kataki AC, Katoch K, Khanna T, Khera A, Kinra S, Koul PA, Krishnan A, Kumar A, Kumar RK, Kumar R, Kurpad A, Ladusingh L, Lodha R, Mahesh PA, Malhotra R, Mathai M, Mavalankar D, Mohan Bv M, Mukhopadhyay S, Murhekar M, Murthy GVS, Nair S, Nair SA, Nanda L, Nongmaithem RS, Oommen AM, Pandian JD, Pandya S, Parameswaran S, Pati S, Prasad K, Prasad N, Purwar M, Rahim A, Raju S, Ramji S, Rangaswamy T, Rath GK, Roy A, Sabde Y, Sachdeva KS, Sadhu H, Sagar R, Sankar MJ, Sharma R, Shet A, Shirude S, Shukla R, Shukla SR, Singh G, Singh NP, Singh V, Sinha A, Sinha DN, Srivastava RK, Srividya A, Suri V, Swaminathan R, Sylaja PN, Tandale B, Thakur JS, Thankappan KR, Thomas N, Tripathy S, Varghese M, Varughese S, Venkatesh S, Venugopal K, Vijayakumar L, Xavier D, Yajnik CS, Zachariah G, Zodpey S, Rao JVRP, Vos T, Reddy KS, Murray CJL, Swaminathan S. Nations within a nation: variations in epidemiological transition across the states of India, 1990-2016 in the Global Burden of Disease Study.	**INT**	**JUL TO DEC**	**PULMONARY MEDICINE**	**PMID:**29150201 **PMCID: PMC**5720596 **WOS:**000417003400023 **Impact Factor:** 47.831 **H-Index:**646

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	India State-Level Disease Burden Initiative Collaborators. Lancet. 2017 Dec 2;390(10111):2437-2460. doi: 10.1016/S0140-6736(17)32804-0. Epub 2017 Nov 14. Erratum in Lancet. 2017 Dec 2;390(10111):e49. BACKGROUND: 18% of the world's population lives in India, and many states of India have populations similar to those of large countries. Action to effectively improve population health in India requires availability of reliable and comprehensive state-level estimates of disease burden and risk factors over time. Such comprehensive estimates have not been available so far for all major diseases and risk factors. Thus, we aimed to estimate the disease burden and risk factors in every state of India as part of the Global Burden of Disease (GBD) Study 2016. METHODS: Using all available data sources, the India State-Level Disease Burden Initiative estimated burden (metrics were deaths, disability-adjusted life-years [DALYs], prevalence, incidence, and life expectancy) from 333 disease conditions and injuries and 84 risk factors for each state of India from 1990 to 2016 as part of GBD 2016. We divided the states of India into four epidemiological transition level (ETL) groups on the basis of the ratio of DALYs from communicable, maternal, neonatal, and nutritional diseases (CMNNDs) to those from non-communicable diseases (NCDs) and injuries combined in 2016. We assessed variations in the burden of diseases and risk factors between ETL state groups and between states to inform a more specific health-system response in the states and for India as a whole. FINDINGS: DALYs due to NCDs and injuries exceeded those due to CMNNDs in 2003 for India, but this transition had a range of 24 years for the four ETL state groups. The age-standardised DALY rate dropped by 36·2% in India from 1990 to 2016. The numbers of DALYs and DALY rates dropped substantially for most CMNNDs between 1990 and 2016 across all ETL groups, but rates of reduction for CMNNDs were slowest in the low ETL state group. By contrast, numbers of DALYs increased substantially for NCDs in all ETL state groups, and increased significantly for injuries in all ETL state groups except the highest. The all-age prevalence of most leading NCDs increased substantially in				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	India from 1990 to 2016, and a modest decrease was recorded in the age-standardised NCD DALY rates. The major risk factors for NCDs, including high systolic blood pressure, high fasting plasma glucose, high total cholesterol, and high body-mass index, increased from 1990 to 2016, with generally higher levels in higher ETL states; ambient air pollution also increased and was highest in the low ETL group. The incidence rate of the leading causes of injuries also increased from 1990 to 2016. The five leading individual causes of DALYs in India in 2016 were ischaemic heart disease, chronic obstructive pulmonary disease, diarrhoeal diseases, lower respiratory infections, and cerebrovascular disease; and the five leading risk factors for DALYs in 2016 were child and maternal malnutrition, air pollution, dietary risks, high systolic blood pressure, and high fasting plasma glucose. Behind these broad trends many variations existed between the ETL state groups and between states within the ETL groups. Of the ten leading causes of disease burden in India in 2016, five causes had at least a five-times difference between the highest and lowest state-specific DALY rates for individual causes. INTERPRETATION: Per capita disease burden measured as DALY rate has dropped by about a third in India over the past 26 years. However, the magnitude and causes of disease burden and the risk factors vary greatly between the states. The change to dominance of NCDs and injuries over CMNNDs occurred about a quarter century apart in the four ETL state groups. Nevertheless, the burden of some of the leading CMNNDs continues to be very high, especially in the lowest ETL states. This comprehensive mapping of inequalities in disease burden and its causes across the states of India can be a crucial input for more specific health planning for each state as is envisioned by the Government of India's premier think tank, the National Institution for Transforming India, and the National Health Policy 2017. FUNDING: Bill & Melinda Gates Foundation; Indian Council of Medical Research, Department of Health Research, Ministry of Health and Family Welfare, Government of India; and World Bank. DOI: 10.1016/S0140-6736(17)32804-0				
112.	Collaborators: Fullman N, Barber RM, Abajobir AA, Abate KH, Abbafati C, Abbas KM, Abd-Allah F, Abdulkader RS, Abdulle AM, Abera SF, Aboyans V, Abu-Raddad LJ, Abu-Rmeileh NME, Adedeji IA, Adetokunboh O, Afshin A, Agrawal A, Agrawal S, Ahmad Kiadaliri A, Ahmadieh H, Ahmed MB, Aichour MTE, Aichour AN, Aichour I, Aiyar S, Akinyemi RO, Akseer N, Al-Aly Z, Alam K, Alam N, Alasfoor D, Alene KA, Alizadeh-Navaei R, Alkerwi A, Alla F, Allebeck P, Allen C, Al-Raddadi R, Alsharif U,	**INT**	**JUL TO DEC**	**PULMONARY MEDICINE**	**Impact Factor:** 47.831 **H-Index:**646

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Altirkawi KA, Alvis-Guzman N, Amare AT, Amini E, Ammar W, Ansari H, Antonio CAT, Anwari P, Arora M, Artaman A, Aryal KK, Asayesh H, Asgedom SW, Assadi R, Atey TM, Atre SR, Avila-Burgos L, Avokpaho EFGA, Awasthi A, Azzopardi P, Bacha U, Badawi A, Balakrishnan K, Bannick MS, Barac A, Barker-Collo SL, Bärnighausen T, Barrero LH, Basu S, Battle KE, Baune BT, Beardsley J, Bedi N, Beghi E, Béjot Y, Bell ML, Bennett DA, Bennett JR, Bensenor IM, Berhane A, Berhe DF, Bernabé E, Betsu BD, Beuran M, Beyene AS, Bhala N, Bhansali A, Bhatt S, Bhutta ZA, Bicer BK, Bidgoli HH, Bikbov B, Bilal AI, Birungi C, Biryukov S, Bizuayehu HM, Blosser CD, Boneya DJ, Bose D, Bou-Orm IR, Brauer M, Breitborde NJK, Brugha TS, Bulto LNB, Butt ZA, Cahuana-Hurtado L, Cameron E, Campuzano JC, Carabin H, Cárdenas R, Carrero JJ, Carter A, Casey DC, Castañeda-Orjuela CA, Castro RE, Catalá-López F, Cercy K, Chang HY, Chang JC, Charlson FJ, Chew A, Chisumpa VH, Chitheer AA, Christensen H, **Christopher DJ**, Cirillo M, Cooper C, Criqui MH, Cromwell EA, Crump JA, Dandona L, Dandona R, Dargan PI, das Neves J, Davitoiu DV, de Courten B, De Steur H, Defo BK, Degenhardt L, Deiparine S, Deribe K, deVeber GA, Ding EL, Djalalinia S, Do HP, Dokova K, Doku DT, Donkelaar AV, Dorsey ER, Driscoll TR, Dubey M, Duncan BB, Ebel BE, Ebrahimi H, El-Khatib ZZ, Enayati A, Endries AY, Ermakov SP, Erskine HE, Eshrati B, Eskandarieh S, Esteghamati A, Estep K, Faraon EJA, Farinha CSES, Faro A, Farzadfar F, Fazeli MS, Feigin VL, Feigl AB, Fereshtehnejad SM, Fernandes JC, Ferrari AJ, Feyissa TR, Filip I, Fischer F, Fitzmaurice C, Flaxman AD, Foigt N, Foreman KJ, Frank T, Franklin RC, Friedman J, Frostad JJ, Fürst T, Furtado JM, Gakidou E, Garcia-Basteiro AL, Gebrehiwot TT, Geleijnse JM, Geleto A, Gemechu BL, Gething PW, Gibney KB, Gill PS, Gillum RF, Giref AZ, Gishu MD, Giussani G, Glenn SD, Godwin WW, Goldberg EM, Gona PN, Goodridge A, Gopalani SV, Goryakin Y, Griswold M, Gugnani HC, Gupta R, Gupta T, Gupta V, Hafezi-Nejad N, Hailu GB, Hamadeh RR, Hammami M, Hankey GJ, Harb HL, Hareri HA, Hassanvand MS, Havmoeller R, Hawley C, Hay SI, He J, Hendrie D, Henry NJ, Heredia-Pi IB, Hoek HW, Holmberg M, Horita N, Hosgood HD, Hostiuc S, Hoy DG, Hsairi M, Htet AS, Huang JJ, Huang H, Huynh C, Iburg KM, Ikeda C, Inoue M, Irvine CMS, Jacobsen KH, Jahanmehr N, Jakovljevic MB, Jauregui A, Javanbakht M, Jeemon P, Jha V, John D, Johnson CO, Johnson SC, Jonas JB, Jürisson M, Kabir Z, Kadel R, Kahsay A, Kamal R, Karch A, Karema CK, Kasaeian A, Kassebaum NJ, Kastor A, Katikireddi SV, Kawakami N, Keiyoro PN, Kelbore SG, Kemmer L, Kengne AP, Kesavachandran CN, Khader YS, Khalil IA, Khan EA, Khang YH, Khosravi A, Khubchandani J, Kieling C, Kim JY, Kim YJ, Kim D, Kimokoti RW, Kinfu Y, Kisa A, Kissimova-Skarbek KA, Kivimaki M, Kokubo Y, Kopec JA, Kosen S, Koul PA, Koyanagi A, Kravchenko M, Krohn KJ, Kulikoff XR, Kumar				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	GA, Kumar Lal D, Kutz MJ, Kyu HH, Lalloo R, Lansingh VC, Larsson A, Lazarus JV, Lee PH, Leigh J, Leung J, Leung R, Levi M, Li Y, Liben ML, Linn S, Liu PY, Liu S, Lodha R, Looker KJ, Lopez AD, Lorkowski S, Lotufo PA, Lozano R, Lucas TCD, Lunevicius R, Mackay MT, Maddison ER, Magdy Abd El Razek H, Magdy Abd El Razek M, Majdan M, Majdzadeh R, Majeed A, Malekzadeh R, Malhotra R, Malta DC, Mamun AA, Manguerra H, Mantovani LG, Manyazewal T, Mapoma CC, Marks GB, Martin RV, Martinez-Raga J, Martins-Melo FR, Martopullo I, Mathur MR, Mazidi M, McAlinden C, McGaughey M, McGrath JJ, McKee M, Mehata S, Mehndiratta MM, Meier T, Meles KG, Memish ZA, Mendoza W, Mengesha MM, Mengistie MA, Mensah GA, Mensink GBM, Mereta ST, Meretoja TJ, Meretoja A, Mezgebe HB, Micha R, Millear A, Miller TR, Minnig S, Mirarefin M, Mirrakhimov EM, Misganaw A, Mishra SR, Mitchell PB, Mohammad KA, Mohammed KE, Mohammed S, Mohan MBV, Mokdad AH, Mollenkopf SK, Monasta L, Montañez Hernandez JC, Montico M, Moradi-Lakeh M, Moraga P, Morawska L, Morrison SD, Moses MW, Mountjoy-Venning C, Mueller UO, Muller K, Murthy GVS, Musa KI, Naghavi M, Naheed A, Naidoo KS, Nangia V, Natarajan G, Negoi RI, Negoi I, Nguyen CT, Nguyen QL, Nguyen TH, Nguyen G, Nguyen M, Nichols E, Ningrum DNA, Nomura M, Nong VM, Norheim OF, Noubiap JJN, Obermeyer CM, Ogbo FA, Oh IH, Oladimeji O, Olagunju AT, Olagunju TO, Olivares PR, Olsen HE, Olusanya BO, Olusanya JO, Ong K, Oren E, Ortiz A, Owolabi MO, Pa M, Pana A, Panda BK, Panda-Jonas S, Papachristou C, Park EK, Patton GC, Paulson K, Pereira DM, Perico DN, Pesudovs K, Petzold M, Phillips MR, Pigott DM, Pillay JD, Pinho C, Piradov MA, Pishgar F, Poulton RG, Pourmalek F, Qorbani M, Radfar A, Rafay A, Rahimi-Movaghar V, Rahman MHU, Rahman MA, Rahman M, Rai RK, Rajsic S, Ram U, Ranabhat CL, Rao PC, Rawaf S, Reidy P, Reiner RC, Reinig N, Reitsma MB, Remuzzi G, Renzaho AMN, Resnikoff S, Rezaei S, Rios Blancas MJ, Rivas JC, Roba KT, Rojas-Rueda D, Rokni MB, Roshandel G, Roth GA, Roy A, Rubagotti E, Sadat N, Safdarian M, Safi S, Safiri S, Sagar R, Salama J, Salomon JA, Samy AM, Sanabria JR, Santomauro D, Santos IS, Santos JV, Santric Milicevic MM, Sartorius B, Satpathy M, Sawhney M, Saxena S, Saylan MI, Schmidt MI, Schneider IJC, Schneider MT, Schöttker B, Schutte AE, Schwebel DC, Schwendicke F, Seedat S, Sepanlou SG, Servan-Mori EE, Shackelford KA, Shaheen A, Shahraz S, Shaikh MA, Shamsipour M, Shamsizadeh M, Shariful Islam SM, Sharma J, Sharma R, She J, Shi P, Shibuya K, Shields C, Shifa GT, Shiferaw MS, Shigematsu M, Shin MJ, Shiri R, Shirkoohi R, Shirude S, Shishani K, Shoman H, Shrime MG, Silberberg DH, Silva DAS, Silva JP, Silveira DGA, Singh JA, Singh V, Sinha DN, Skiadaresi E, Slepak EL, Sligar A, Smith DL, Smith A, Smith M, Sobaih BHA, Sobngwi E, Soljak M, Soneji S, Sorensen RJD, Sposato LA,				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Sreeramareddy CT, Srinivasan V, Stanaway JD, Stein DJ, Steiner C, Steinke S, Stokes MA, Strub B, Sufiyan MB, Sunguya BF, Sur PJ, Swaminathan S, Sykes BL, Sylte DO, Szoeke CEI, Tabarés-Seisdedos R, Tadakamadla SK, Tandon N, Tao T, Tarekegn YL, Tavakkoli M, Taveira N, Tegegne TK, Terkawi AS, Tessema GA, Thakur JS, Thankappan KR, Thrift AG, Tiruye TY, Tobe-Gai R, Topor-Madry R, Torre A, Tortajada M, Tran BX, Troeger C, Truelsen T, Tsoi D, Tuem KB, Tuzcu EM, Tyrovolas S, Ukwaja KN, Uneke CJ, Updike R, Uthman OA, van Boven JFM, Varughese S, Vasankari T, Venketasubramanian N, Vidavalur R, Violante FS, Vladimirov SK, Vlassov VV, Vollset SE, Vos T, Wadilo F, Wakayo T, Wallin MT, Wang YP, Weichenthal S, Weiderpass E, Weintraub RG, Weiss DJ, Werdecker A, Westerman R, Whiteford HA, Wijeratne T, Wiysonge CS, Woldeyes BG, Wolfe CDA, Woodbrook R, Xavier D, Xu G, Yadgir S, Yakob B, Yan LL, Yano Y, Yaseri M, Ye P, Yimam HH, Yip P, Yonemoto N, Yoon SJ, Yotebieng M, Younis MZ, Zaidi Z, Zaki MES, Zavala-Arciniega L, Zhang X, Zipkin B, Zodpey S, Lim SS, Murray CJL. **GBD 2016 SDG Collaborators.** Measuring progress and projecting attainment on the basis of past trends of the health-related Sustainable Development Goals in 188 countries: an analysis from the Global Burden of Disease Study 2016. Lancet. 2017 Sep 16;390(10100):1423-1459. doi: 10.1016/S0140-6736(17)32336-X. Epub 2017 Sep 12. BACKGROUND: The UN's Sustainable Development Goals (SDGs) are grounded in the global ambition of "leaving no one behind". Understanding today's gains and gaps for the health-related SDGs is essential for decision makers as they aim to improve the health of populations. As part of the Global Burden of Diseases, Injuries, and Risk Factors Study 2016 (GBD 2016), we measured 37 of the 50 health-related SDG indicators over the period 1990-2016 for 188 countries, and then on the basis of these past trends, we projected indicators to 2030. METHODS: We used standardised GBD 2016 methods to measure 37 health-related indicators from 1990 to 2016, an increase of four indicators since GBD 2015. We substantially revised the universal health coverage (UHC) measure, which focuses on coverage of essential health services, to also represent personal health-care access and				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	quality for several non-communicable diseases. We transformed each indicator on a scale of 0-100, with 0 as the 2·5th percentile estimated between 1990 and 2030, and 100 as the 97·5th percentile during that time. An index representing all 37 health-related SDG indicators was constructed by taking the geometric mean of scaled indicators by target. On the basis of past trends, we produced projections of indicator values, using a weighted average of the indicator and country-specific annualised rates of change from 1990 to 2016 with weights for each annual rate of change based on out-of-sample validity. 24 of the currently measured health-related SDG indicators have defined SDG targets, against which we assessed attainment. FINDINGS: Globally, the median health-related SDG index was 56·7 (IQR 31·9-66·8) in 2016 and country-level performance markedly varied, with Singapore (86·8, 95% uncertainty interval 84·6-88·9), Iceland (86·0, 84·1-87·6), and Sweden (85·6, 81·8-87·8) having the highest levels in 2016 and Afghanistan (10·9, 9·6-11·9), the Central African Republic (11·0, 8·8-13·8), and Somalia (11·3, 9·5-13·1) recording the lowest. Between 2000 and 2016, notable improvements in the UHC index were achieved by several countries, including Cambodia, Rwanda, Equatorial Guinea, Laos, Turkey, and China; however, a number of countries, such as Lesotho and the Central African Republic, but also high-income countries, such as the USA, showed minimal gains. Based on projections of past trends, the median number of SDG targets attained in 2030 was five (IQR 2-8) of the 24 defined targets currently measured. Globally, projected target attainment considerably varied by SDG indicator, ranging from more than 60% of countries projected to reach targets for under-5 mortality, neonatal mortality, maternal mortality ratio, and malaria, to less than 5% of countries projected to achieve targets linked to 11 indicator targets, including those for childhood overweight, tuberculosis, and road injury mortality. For several of the health-related SDGs, meeting defined targets hinges upon substantially faster progress than what most countries have achieved in the past. INTERPRETATION: GBD 2016 provides an updated and expanded evidence base on where the world currently stands in terms of the health-related SDGs. Our improved measure of UHC offers a basis to monitor the expansion of health services necessary to meet the SDGs. Based on past rates of progress, many places are facing challenges in meeting defined health-related SDG targets, particularly among countries that are the worst off. In view of the early stages of SDG implementation, however, opportunity remains to take actions to accelerate progress, as shown by the catalytic effects of adopting the Millennium Development Goals after 2000. With the SDGs' broader, bolder development agenda, multisectoral commitments and investments are vital to				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	make the health-related SDGs within reach of all populations. FUNDING: Bill & Melinda Gates Foundation. Copyright © 2017 The Authors. Published by Elsevier Ltd. This is an Open Access article published under the CC BY 4.0 license. Published by Elsevier Ltd.. All rights reserved. DOI: 10.1016/S0140-6736(17)32336-X				
113.	Crawford, S. E., Ramani, S., Tate, J. E., Parashar, U. D., Svensson, L., Hagbom, M., Franco, M. A., Greenberg, H. B., O'ryan, M., **Kang, G.,** Desselberger, U. and Estes, M. K. Rotavirus infection Nat Rev Dis Primers; 2017, 3 17083 **Address:** Department of Molecular Virology and Microbiology, Baylor College of Medicine, One Baylor Plaza, MS: BCM-385, Houston, Texas 77030, USA. Division of Viral Diseases, National Center for Immunization and Respiratory Diseases, United States Centers for Disease Control and Prevention, Atlanta, Georgia, USA. Division of Molecular Virology, Medical Faculty, Linkoping University, Linkoping, Sweden. Department of Medicine, Karolinska Institute, Stockholm, Sweden. Instituto de Genetica Humana, Facultad de Medicina, Pontificia Universidad Javeriana, Bogota, Colombia. Department of Microbiology and Immunology, Stanford University, Stanford, California, USA. Microbiology and Mycology Program, Institute of Biomedical Sciences, and Millennium Institute of Immunology and Immunotherapy, Faculty of Medicine, Universidad de Chile, Santiago, Chile. Translational Health and Science Technology Institute, Faridabad, India. Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India. Department of Medicine, University of Cambridge, Addenbrooke's Hospital, Cambridge, UK. Rotavirus infections are a leading cause of severe, dehydrating gastroenteritis in children <5 years of age. Despite the global introduction of vaccinations for rotavirus over a decade ago, rotavirus infections still result in >200,000 deaths annually, mostly in low-income countries. Rotavirus primarily infects enterocytes and induces diarrhoea through the destruction of absorptive enterocytes (leading	**INT**	**JUL TO DEC**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**29119972 **Impact Factor:** 6.389 **H-Index:**7

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	to malabsorption), intestinal secretion stimulated by rotavirus non-structural protein 4 and activation of the enteric nervous system. In addition, rotavirus infections can lead to antigenaemia (which is associated with more severe manifestations of acute gastroenteritis) and viraemia, and rotavirus can replicate in systemic sites, although this is limited. Reinfections with rotavirus are common throughout life, although the disease severity is reduced with repeat infections. The immune correlates of protection against rotavirus reinfection and recovery from infection are poorly understood, although rotavirus-specific immunoglobulin A has a role in both aspects. The management of rotavirus infection focuses on the prevention and treatment of dehydration, although the use of antiviral and anti-emetic drugs can be indicated in some cases.				
114.	Cruz, M. S., Alarconfalconi, T. M., Hartwick, M. A., Venkat, A., Ehrlich, H. Y., Anandan, S., Ward, H. D., **Veeraraghavan, B.** and Naumova, E. N. From hospitalization records to surveillance: The use of local patient profiles to characterize cholera in Vellore, India PLoS One; 2017, 12 (8): e0182642 **Address:** Sackler School of Graduate Biomedical Sciences, Tufts University, Boston, Massachusetts, United States of America. School of Engineering, Tufts University, Medford, Massachusetts, United States of America. School of Marine Science and Ocean Engineering, University of New Hampshire, Durham, New Hampshire, United States of America. Yale University, New Haven, Connecticut, United States of America. **Christian Medical College, Vellore,** Tamil Nadu, India. Tufts Medical Center, Boston, Massachusetts, United States of America. Friedman School of Nutrition Science & Policy, Tufts University, Boston, Massachusetts, United States of America. Despite availability of high quality medical records, health care systems often do not have the resources or tools to utilize these data efficiently. Yet, hospital-based, laboratory-confirmed records may pave the way for building reliable surveillance systems capable of monitoring temporal trends of emerging infections. In this communication, we present a new tool to compress and visualize medical records with a local population profile (LPP) approach, which transforms information into statistically comparable patterns. We provide a step-by-step tutorial on how to	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY**	**PMID:**28820902 **PMCID:**5562306 **Impact Factor:** 2.806 **H-Index:**218

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	build, interpret, and expand the use of LPP using hospitalization records of laboratory-confirmed cholera. We abstracted case information from the databases maintained by the Department of Clinical Microbiology at **Christian Medical College** in Vellore, India. We used a single-year age distribution to construct LPPs for O1, O139, and non O1/O139 serotypes of Vibrio cholerae. Disease counts and hospitalization rates were converted into fitted kernel-based probability densities. We formally compared LPPs with the Kolmogorov-Smirnov test, and created multi-panel visuals to depict temporal trend, age distribution, and hospitalization rates simultaneously. Our first implementation of LPPs revealed information that is typically gathered from surveillance systems such as: i) estimates of the demographic distribution of diseases and identification of a population at risk, ii) changes in the dominant pathogen presence; and iii) trends in disease occurrence. The LPP demonstrated the benefit of increased resolution in pattern detection of disease for different Vibrio cholerae serotypes and two demographic categories by showing patterns and anomalies that would be obscured by traditional methods of analysis and visualization. LPP can be used effectively to compile basic patient information such as age, sex, diagnosis, location, and time into compact visuals. Future development of the proposed approach will allow public health researchers and practitioners to broadly utilize and efficiently compress large volumes of medical records without loss of information.				
115.	CS Sundar, S Balukrishna, SS Varghese, B Selvamani Hypofractionated Radiotherapy for Breast Cancer–CMC Experience Clinical Oncology 29 (3), e77 **Address:** Christian Medical College Vellore, India Aims: Ten year results of the UK Standardisation of Breast Radiotherapy (START) trials suggested that lower total doses of radiotherapy delivered in fewer, larger fractions are as safe and effective as the conventional standard regimen (50 Gy in 25 fractions) for women after breast conservation surgery (BCS) for early breast cancer. The purpose of this study is to review the acute toxicity and feasibility of hypofractionated regimen radiotherapy post-mastectomy and post-BCS in our patient population.	**INT**	**JUL TO DEC**	**RADIOTHERAPY**	**NO PMID** **WOS:**000399001700018 **Impact Factor:**3.236 **H-Index:**61
116.	Cunha, C., Alexander, S., Ashby, D., Lee, J., Chusney, G., Cairns, T. D. and Lightstone, L. Hydroxycloroquine blood concentration in lupus nephritis: a determinant of disease	**INT**	**JUL TO DEC**	**NEPHROLOGY**	**PMID:**29186572 **Impact Factor:** 4.470

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	outcome? Nephrol Dial Transplant; 2017, **Address:** Nephrology Department, Centro Hospitalar de VilaNova de Gaia/Espinho, Vila Nova de Gaia, Portugal. Nephrology Department, **Christian Medical College vellore**, Vellore, Tamilnadu, India. Imperial College Lupus Centre, Imperial College Healthcare NHS Trust, London, UK. Leslie Brent Laboratory, Imperial College Healthcare NHS Trust, London, UK. Section of Renal Medicine, Department of Medicine, Imperial College London, UK. Background: Hydroxychloroquine (HCQ) is a recommended drug in systemic lupus erythematosus (SLE). It has a long terminal half-life, making it an attractive target for therapeutic drug monitoring. The aim of this study was to establish a relationship between blood HCQ concentration and lupus nephritis activity. Methods: We conducted a retrospective observational study with data collected from clinical and laboratory records. Inclusion criteria were patients followed in the lupus clinic with biopsy-proven International Society of Nephrology/Renal Pathology Society Classes III, IV or V lupus nephritis on HCQ for at least 3 months (200-400 mg daily) and with HCQ levels measured during treatment. Exclusion criteria were patients on renal replacement therapy at baseline or patients lost to follow-up. Results: In 171 patients, the HCQ level was measured in 1282 samples. The mean HCQ blood level was 0.75+/-0.54mg/L and it was bimodally distributed. An HCQ level <0.20 mg/L [232 samples (18.1%)] appeared to define a distinct group of abnormally low HCQ levels. For patients in complete or partial remission at baseline compared with those remaining in remission, patients with renal flare during follow-up had a significantly lower average HCQ level (0.59 versus 0.81 mg/L; P= 0.005). Our data suggest an HCQ target level to reduce the likelihood of renal flares >0.6 mg/L (600 ng/mL) in those patients with lupus nephritis. Conclusion: HCQ level monitoring may offer a new approach to identify non-adherent patients and support them appropriately. We propose an HCQ minimum target level of at least 0.6 mg/L to reduce the renal flare rate, but this will require a prospective study for validation.				**H-Index:**146
117.	D'cunha, Aureen, Susan, Jehangir, Grace, Rebekah, Jacob, Kurian Jujju, John, Jacob Tarun, Joseph, Thomas Reju, John, Mathai and Sampath, Karl Outcome and renal function following salvage surgery for bilateral Wilms tumor: a single-institution experience	**INT**	**JUL TO DEC**	**PEDIATRIC SURGERY, BIOSTATISTICS,**	**PMID:**01287829-201707000-00008 **INDEX**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Annals of Pediatric Surgery; 2017, 13 (3): 145-149 **Address:** aDepartments of Paediatric Surgery bDepartment of Biostatistics, **Christian Medical College,** MGR Tamil Nadu Medical University, Vellore, Tamil Nadu 632004, India Correspondence to Aureen D'Cunha, MBBS, MS, Department of Paediatric Surgery, 6th Floor, ISCC Building, **Christian Medical College and Hospital, Vellore**, Tamil Nadu 632004, India Tel: +91 416 228 3369; fax: +91 416 228 2035; e-mail: aureen_d@yahoo.com Objective The aim of this study was to determine the surgical outcomes and renal function following salvage surgery for bilateral Wilms tumor (BWT). Summary background data The challenge for the surgeon treating BWT lies in striking a fine balance between renal preservation and oncological clearance. Methods This is a retrospective review of medical records in a tertiary care hospital in India. Nine children with BWT who presented between 2005 and 2015 were reviewed and followed up through telephone. Survival rates were calculated using the Kaplan–Meier method. A P value of less than 0.05 was considered statistically significant. Results Seven (78%) of nine children were boys and two (22%) were syndromic. Six (67%) children presented at less than 1 year of age. Eight (89%) children presented with an abdominal mass. There were no metastases at presentation. All children underwent trucut biopsy and neoadjuvant chemotherapy. Six children underwent surgery: four underwent bilateral nephron sparing surgery (NSS) and two underwent unilateral nephrectomy with contralateral NSS. Tumor recurred in two children. The mean follow-up was 38 months (range: 5–108 months). Creatinine clearance (CrCl) improved postoperatively in all children. Postoperative hypertension was transient and resolved with improvement in CrCl. Conclusion Children with BWT in the Indian subcontinent may be younger than those in the rest of the world. NSS yields good outcomes even for recurrences. Postoperative hypertension is transient in the majority of patients and correlated with improvement in CrCl. Prognosis is related to operability and syndromic association.				**COPERNICUS Impact Factor:0.28** **H Index:3**
118.	Dahiya, S., Sharma, P., Kumari, B., Pandey, S., Malik, R., Manral, N., Veeraraghavan, B., Pragasam, A. K., Ray, P., Gautam, V., Sistla, S., Parija, S. C., Walia, K., Ohri, V., Das, B. K., Sood, S. and Kapil, A.	**NAT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY**	**PMID:**28303820 **Impact Factor:** 1.149

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Characterisation of antimicrobial resistance in Salmonellae during 2014-2015 from four centres across India: An ICMR antimicrobial resistance surveillance network report Indian J Med Microbiol; 2017, 35 (1): 61-68 **Address:** Department of Microbiology, All India Institute of Medical Sciences, New Delhi, India. Department of Microbiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Microbiology, Postgraduate Institute of Medical Education and Research, Chandigarh, India. Department of Microbiology, Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry, India. ICMR, New Delhi, India. **PURPOSE:** The main purpose of this study was to establish 'Antimicrobial Resistance Surveillance Network' in India and to monitor the antimicrobial susceptibility profile of clinical isolates to establish a national network across the country for monitoring antimicrobial resistance in Salmonella. **MATERIALS AND METHODS:** This study was conducted at All India Institute of Medical Sciences, nodal centre with clinical isolates of Salmonellae collected from four centres across India, which included **Christian Medical College, Vellore**; Postgraduate Institute of Medical Education and Research, Chandigarh and Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry. Total 20% of the selected strains from each centre were characterised for molecular studies which included molecular mechanism of fluoroquinolones resistance and multiple locus sequence type. **RESULTS:** A total of 622 Salmonellae were received from all centres during January 2014 to December 2015. Out of these 622 isolates, 380 were Salmonella Typhi, 162 were Salmonella Paratyphi A and 7 were S. Paratyphi B isolated from blood and 73 were other Salmonella serotypes. Multiple drug resistance (resistant to ampicillin, chloramphenicol and co-trimoxazole) was less than 3% in S. Typhi. In S. Paratyphi A, chloramphenicol and co-trimoxazole susceptibility was 100% and 99%, respectively, whereas ampicillin susceptibility was 86% (139/161). Ciprofloxacin and nalidixic acid susceptibility was 15% (24/162) and 1% (2/162) from all centres. S. Paratyphi B was isolated from 7 patients. All isolates were third-generation cephalosporin sensitive. The most common mutations found were at codon 83 and at codon 87. We did not find any mutation in acrR gene. Efflux				**H-Index:**38

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	pump and qnr genes were not found in any isolate tested. All 86 S. Typhi isolates clustered into two sequence types - ST1 and ST2. Out of these 86 isolates, 70 S. Typhi were ST1 and 16 were ST2. All S. Paratyphi A was clustered in ST85 and ST129 on the basis of mutation in sucA gene. Out of 27 S. Paratyphi A, 13 were grouped into ST85 and 14 were grouped into ST129. **CONCLUSIONS:** Enteric fever is one such infection which poses challenges in antimicrobial resistance. Hence, continuous surveillance is important to track bacterial resistance and to treat infections in a cost-effective manner.				
119.	Danda, D., Goel, R., Danda, S., Mohan, H., Joseph, G., Kabeerdoss, J. and Nath, S. K. Interleukin-17F and interleukin-6 gene polymorphisms in Asian Indian patients with Takayasu arteritis Hum Immunol. 2017 Jul - Aug;78(7-8):515-520. doi: 10.1016/j.humimm.2017.04.008. Epub 2017 Apr 22. **Address:** Dept of Rheumatology, **Christian Medical College, Vellore,** India. Electronic **Address:** debashisdandacmc@hotmail.com. Dept of Rheumatology, **Christian Medical College, Vellore,** India. Electronic **Address:** drruchika_agro@yahoo.co.in. Dept of Clinical Genetics, **Christian Medical College, Vellore,** India. Electronic **Address:** sdanda@cmcvellore.ac.in. Dept of Rheumatology, **Christian Medical College, Vellore,** India. Electronic **Address:** hindhumathimohan@gmail.com. Dept of Cardiology, **Christian Medical College, Vellore,** India. Electronic **Address:** joseph59@gmail.com. Dept of Rheumatology, **Christian Medical College, Vellore,** India. Electronic **Address:** jayakanthankk@gmail.com. Arthritis & Clinical Immunology Program, Oklahoma Medical Research Foundation, 825 NE 13th St., Oklahoma City, OK 73104, United States. Electronic **Address:** Swapan-Nath@omrf.org. **OBJECTIVES:** To assess genetic association between single nucleotide polymorphisms (SNPs) in genes encoding T-helper cytokines and Takayasu Arteritis (TA) susceptibility in Asian Indian population. **METHODS:** In Phase-1, the genomic DNA of 120 TA patients and 119 healthy controls were genotyped for SNPs rs1800795 (interleukin (IL)-6), rs763780 (IL-17F), rs1800871, rs1800872, rs1800896 (IL-10) and rs1800468, rs1800469, rs1800470 (transforming growth factor-beta). Allele frequencies between cases and controls were compared using	**INT**	**JAN TO JUN**	**RHEUMATOLOGY, CLINICAL GENETICS, CARDIOLOGY**	**PMID:**28438554 **Impact Factor:** 2.311 **H-Index:**84

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	chi-squared test and also reassessed empirically (pe) by 10,000 permutations. In Phase-2, additional 98 TA patients and 101 controls were genotyped for replicating the significant associations noted in Phase-1 of the study. **RESULTS:** All 8 SNPs in Phase 1 were in Hardy-Weinberg proportions. The G allele at rs763780 (IL-17F) was significantly associated with TA (p=0.014). We also found that rs1800795 (IL-6) was associated with tuberculosis (p=0.001) under a dominant model. In Phase-2 replication part of the study, the rs763780 showed a trend towards association with TA (p=0.08), and the magnitude and direction of the odds ratio (OR) also were consistent with results of Phase-1. In the combined analysis, protective association of the G allele of rs763780 with TA was again significant [OR (95% CI)=0.44 (0.25-0.77); p=0.0029]. The G allele was also significantly associated (p<0.05) with underlying tuberculosis (TB) and occurrence of syncope in TA. **CONCLUSION:** G allele of rs763780 in IL-17F gene was protectively associated against susceptibility to TA. GG genotypes of rs1800795 in IL-6 was also associated with occurrence of tuberculosis in our patients with TA.				
120.	Danda, D., Sharma, R., Truong, D., Koelsch, K. A., Kurien, B. T., Bagavant, H., Deshmukh, U., Kaufman, C. E., Lewis, D. M., Stone, D. U., Radfar, L., Rasmussen, A., Sivils, K. L. and Scofield, R. H. Anti-La positive, anti-Ro negative subset of primary Sjogren's syndrome: anti-La is a reality but is the disease? Clin Exp Rheumatol; 2017, 35 (3): 438-444 **Address:Christian Medical College, Vellore,** India. The Arthritis and Clinical Immunology Program, Oklahoma Medical Research Foundation; Department of Medicine, University of Oklahoma Health Sciences Center; and Medical Service, Department of Veterans Affairs Medical Center, Oklahoma City, USA. The Arthritis and Clinical Immunology Program, Oklahoma Medical Research Foundation, Oklahoma City, USA. Department of Medicine, University of Oklahoma Health Sciences Center, Oklahoma City, USA. Department of Oral and Maxillofacial Pathology, University of Oklahoma College of Dentistry, Oklahoma City, USA. Department of Ophthalmology, University of Oklahoma Health Sciences Center, Oklahoma City, USA. Oral Diagnosis and Radiology Department, University of Oklahoma College of Dentistry, Oklahoma City, USA.	**INT**	**JUL TO DEC**	**RHEUMATOLOGY**	**PMID:**28229827 **Impact Factor:**2.634 **H-Index:**81

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	The Arthritis and Clinical Immunology Program, Oklahoma Med.Research Foundation; Dept.of Medicine, University of Oklahoma Health Sciences Center; and Medical Service, Dept.of Veterans Affairs Medical Center, Oklahoma City, USA. hal-scofield@omrf.ouhsc.edu. OBJECTIVES: To characterise the serological and clinical findings in primary Sjogren's syndrome in which anti-La was found without anti-Ro. We hypothesised that a significant portion of these are falsely negative for anti-Ro60. METHODS: Twenty-nine sera from primary Sjogren's syndrome patients were tested for antibodies directed against La and Ro. Anti-La was detected using bovine La treated with or without DNAase and RNAase to identify potential false positivity. Anti-Ro60 antibodies were detected using HEp-2000 substrate (in which cells are transfected with human Ro60) and HEp-2 substrate. Anti-Ro60 and Ro-52 were also tested by in vitro transcription/translation followed by immunoprecipitation assay. RESULTS: All 29 sera bound La, even after treatment with DNAase and RNAase. Of the 29 sera, 25 were unequivocally negative on HEp-2000 (1:40 dilution). Four samples were anti-Ro60 positive with a speckled pattern, three of the four at 1:320 dilution. Thus, false negative anti-Ro60 exists in a small fraction (14%) of the Ro-negative/La-positive primary Sjogren's patients. However, all the samples were negative for Ro60 and Ro52 by in vitro immunoprecipitation assay. Clinically these patients tended not to have salivary gland pathology characteristic of Sjogren's syndrome. CONCLUSIONS: We found only a small fraction of Ro negative/La positive sera to show positive HEp-2000 pattern. These subjects did not have characteristic findings on pathological examination of minor salivary glands, suggesting these subjects have a process distinct from Sjogren's syndrome.				
121.	Dangi, A. D., Nagarajan, R., Panda, A., Kumar, R. M., Devasia, A. and Kekre, N. Does asymptomatic prostatic inflammation alter the outcome of transurethral resection of prostate? Cent European J Urol; 2017, 70 (3): 252-258 **Address:** Department of Urology, **Christian Medical College and Hospital, Vellore**, India. Department of Pathology, **Christian Medical College and Hospital, Vellore**, India. Introduction: There is contradictory evidence in literature with respect to the	**INT**	**JUL TO DEC**	**UROLOGY, PATHOLOGY**	**PMID:**29104787 **PMCID:**5656360 **Impact Factor:**0.700 **H-Index:**9

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	association of asymptomatic prostatic inflammation on biopsy with complications of Transurethral Resection of Prostate. The aim of the present study was to evaluate the association of prostatitis in biopsy specimens of patients undergoing transurethral resection of prostate with bladder neck contracture (the primary end point) and other complications. Material and methods: Patients who had undergone transurethral resection at a single centre between 2005 and 2010, with a minimum of 3 months follow-up were included. The study population was divided into two cohorts: those with inflammation on prostatic biopsy (Group A) and those without (Group B). These two groups were compared with respect to demographic data and pre-operative and intraoperative confounding factors. Immediate complications were documented using the modified Clavien-Dindo system and compared. Long term complications like bladder neck contracture, meatal stenosis, urethral stricture, and recurrent adenoma were also compared. Results: Both groups were comparable except for Group A patients having a higher median resected weight (20 vs. 14 gms, p = 0.009). There was no significant difference between the groups with respect to the rate of bladder neck contracture and other long-term and short term complications on univariate and multivariate analysis. Larger resected weight of gland was associated with lower rate of bladder neck contracture on multivariate analysis (p = 0.019, Odds ratio: 0.937). Conclusions: Presence of histologically confirmed prostatic inflammation is not associated with bladder neck contracture or other complications following transurethral resection. Smaller resected prostatic weight was associated with higher incidence of bladder neck contracture.				
122.	Daniel, H. D., David, J., Raghuraman, S., Gnanamony, M., Chandy, G. M., Sridharan, G. and Abraham, P. Comparison of Three Different Hepatitis C Virus Genotyping **METHODS:** 5'NCR PCR-RFLP, Core Type-Specific PCR, and NS5b Sequencing in a Tertiary Care Hospital in South India J Clin Lab Anal; 2017, 31 (3): **Address:** Department of Clinical Virology, **Christian Medical College, Vellore,** India. Department of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India.☐☐**BACKGROUND:** Based on genetic heterogeneity, hepatitis C virus (HCV) is classified into seven major genotypes and 64 subtypes. In spite of the sequence	**INT**	**JAN TO JUN**	**CLINICAL VIROLOGY, GASTROINTESTINAL SCIENCES**	**PMID:**27580956 **Impact Factor:** 1.521 **H-Index:**40

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	heterogeneity, all genotypes share an identical complement of colinear genes within the large open reading frame. The genetic interrelationships between these genes are consistent among genotypes. Due to this property, complete sequencing of the HCV genome is not required. HCV genotypes along with subtypes are critical for planning antiviral therapy. Certain genotypes are also associated with higher progression to liver cirrhosis. **METHODS:** In this study, 100 blood samples were collected from individuals who came for routine HCV genotype identification. These samples were used for the comparison of two different genotyping methods (5'NCR PCR-RFLP and HCV core type-specific PCR) with NS5b sequencing. **RESULTS:** Of the 100 samples genotyped using 5'NCR PCR-RFLP and HCV core type-specific PCR, 90% (kappa = 0.913, P < 0.00) and 96% (kappa = 0.794, P < 0.00) correlated with NS5b sequencing, respectively. Sixty percent and 75% of discordant samples by 5'NCR PCR-RFLP and HCV core type-specific PCR, respectively, belonged to genotype 6. All the HCV genotype 1 subtypes were classified accurately by both the methods. **CONCLUSION:** This study shows that the 5'NCR-based PCR-RFLP and the HCV core type-specific PCR-based assays correctly identified HCV genotypes except genotype 6 from this region. Direct sequencing of the HCV core region was able to identify all the genotype 6 from this region and serves as an alternative to NS5b sequencing.				
123.	Darapu, A., Balakrishnan, R., Sebastian, P., Hussain, M. R., Ravindran, P. and John, S. Is the Deep Inspiration Breath-Hold Technique Superior to the Free Breathing Technique in Cardiac and Lung Sparing while Treating both Left-Sided Post-Mastectomy Chest Wall and Supraclavicular Regions? Case Rep Oncol; 2017, 10 (1): 37-51 **Address:** Department of Radiotherapy, **Christian Medical College, Vellore,** India. Medical Physics, **Christian Medical College, Vellore,** India. **AIMS:** To evaluate the efficacy of the deep inspirational breath-hold (DIBH) technique and its dosimetric advantages over the free breathing (FB) technique in cardiac (heart and left anterior descending artery [LAD]) and ipsilateral lung sparing in left-sided post-mastectomy field-in-field conformal radiotherapy. DIBH is highly reproducible, and this study aims to find out its dosimetric benefits over FB. **MATERIALS AND METHODS:** Nineteen left-sided mastectomy patients were	**INT**	**JAN TO JUN**	**RADIOTHERAPY, MEDICAL PHYSICS**	**PMID:**28203163 **Impact Factor:**0.880 **H-Index:**12

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	immobilized using breast boards with both arms positioned above the head. All patients had 2 sets of planning CT images (one in FB and another in DIBH) with a Biograph TruePoint HD CT scanner in the same setup. DIBH was performed by tracking the respiratory cycles using a Varian Real-Time Position Management system. The target (chest wall and supraclavicular region), organs at risk (OARs; ipsilateral lung, contralateral lung, heart, LAD, and contralateral breast), and other organs of interests were delineated as per the RTOG (Radiation Therapy Oncology Group) contouring guidelines. The single-isocenter conformal fields in the field treatment plans were generated with the Eclipse Treatment Planning System (Varian Medical Systems) for both FB and DIBH images, and the doses to the target and OARs were compared. The standard fractionation regimen of 50 Gy in 25 fractions over a period of 5 weeks was used for all patients in this study. RESULTS AND DISCUSSION: The target coverage parameters (V95, V105, V107, and D_{mean}) were found to be 97.8 +/- 0.9, 6.1 +/- 3.4, 0.2 +/- 0.3, and 101.9 +/- 0.5% in the FB plans and 98.1 +/- 0.8, 6.1 +/- 3.2, 0.2 +/- 0.3, and 101.9 +/- 0.4% in the DIBH plans, respectively. The plan quality indices (conformity index and homogeneity index) also showed 1.3 +/- 0.2 and 0.1 for the FB plans and 1.2 +/- 0.3 and 0.1 for the DIBH plans, respectively. There was a significant reduction in dose to the heart in the DIBH plans compared to the FB plans, with p values of nearly 0 for the V5, V10, V25, V30, and D_{mean} dosimetric parameters. The difference in ipsilateral lung doses between FB and DIBH showed statistically significant p values, and the differences in mean doses were found to be 7, 15.7, 11.8, and 10.7% for V5, V20, V30, and D_{mean}, respectively. There was a significant reduction in dose to the LAD in the DIBH compared to the FB plans. **CONCLUSIONS:** DIBH resulted in significant reductions in doses to the heart, LAD, and lungs, since with this technique there was an increase in the distance between the target and the OARs. With appropriate patient selection and adequate training, the DIBH technique is acceptable and achievable for radiotherapy to the chest, and therefore should be considered for all suitable patients, as this could result in fewer radiotherapy-related complications. However, this technique is time-consuming, since the setup is complex, results in an increased time for treatment delivery, and needs patient cooperation and technical expertise.				
124.	Das Adhikari, D., Das, S., Winston, A. B., Vazhudhi, K., Kumar, A., Shanthi Fx, M. and Agarwal, I. A retrospective study on non-drug related poisoning in the community among	**INT**	**JAN TO JUN**	**PAEDIATRICS, PHARMACOLOGY**	**PMID:**28306345 **Impact Factor:**1.220 **H-Index:**14

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	children from south India Hosp Pract (1995); 2017, 45 (2): 39-45 **Address:** a Paediatric Emergency, Department of Paediatrics, **Christian Medical College, Vellore,** Tamil Nadu, India. b Department of Pharmacology and Clinical Pharmacology, **Christian Medical College, Vellore,** Tamil Nadu, India. c Child Health 2, Department of Paediatrics, **Christian Medical College, Vellore,** Tamil Nadu, India. **OBJECTIVES:** This retrospective study was performed to determine the incidence, demographic distribution, types and outcomes across various non-drug related poisonings among children attending a tertiary care center in south India. **METHODS:** All children from 0-16 years who presented to the Paediatric Emergency Department, **Christian Medical College, Vellore** with non-drug related poisoning from October 2004 to September 2013 were included. **RESULTS:** Out of the total 997 cases of poisoning, 629 (63.1%) cases were contributed by chemicals and plants: mainly hydrocarbons (kerosene) 309 (49.1%); organophosphates 72 (11.5%); corrosive acids and alkalis 57 (9.1%); insecticides 51 (8.1%); and plant poisons 20 (3.2%). Males (62.79%) and children < 5 years (77.42%) were mostly affected. Although many children developed complications requiring intensive care unit admissions, the total mortality was only 9 (1.4%). The incidence of poisoning showed a decreasing trend over the last 4 years. **CONCLUSION:** This study for the first time gives an elaborative insight on non-drug related pediatric poisoning from a tertiary care center in south India for almost a decade.				
125.	Das, M. and John, T. J. Lychee-associated acute hypoglycaemic encephalopathy outbreaks in Muzaffarpur, India Lancet Glob Health; 2017, 5 (9): e859-e860 **Address:** CSIR-Indian Institute of Toxicology Research, Lucknow 226001, India. Electronic address: mditrc@rediffmail.com. 439 Civil Supplies Godown Lane, Kamalakshipuram, Vellore 632002, India	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY**	**PMID:**28807176 **Impact Factor:** 17.686 **H-Index:**34
126.	Das, S. and Barnwal, P.	**INT**	**JUL TO**	**PHARMACOLO**	**PMID:**28823190

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	The need to train uncertified rural practitioners in India J Int Med Res; 2017, 300060517724948 **Address:** 1 Department of Pharmacology and Clinical Pharmacology, **Christian Medical College, Vellore,** India. 2 Department of Medical Elementology and Toxicology, School of Chemical and Life Sciences, Jamia Hamdard (Hamdard University), New Delhi, India. Uncertified rural practitioners (URPs) without formal medical qualification occupy an indispensable yet dangerous position in the rural health care system in India. The low cost, close proximity, and higher health hazards in rural areas along with the inability of established health-care setups to fulfill existing demands have favored the flourishing trade of URPs. Irrational and dangerous drug prescriptions, unauthorized interventions, improper waste disposal, and several cases of malpractice by URPs are serious threats to the exposed population. However, because of the practical compulsion and real-world necessity of their existence, URPs should be scientifically trained and sensitized to regulate, qualify, and integrate them as a part of the existing health care system in India.		**DEC**	**GY**	**Impact Factor:** 1.323 **H-Index:**47
127.	Das, S., Barnwal, P., Maiti, T., Ramasamy, A., Mondal, S. and Babu, D. Addiction to Snake Venom Subst Use Misuse; 2017, 52 (8): 1104-1109 **Address:** a Department of Pharmacology and Clinical Pharmacology, **Christian Medical College, Vellore,** India. b Department of Medical Elementology and Toxicology, Jamia Hamdard (Hamdard University), New Delhi, India. c Department of Psychiatry, **Christian Medical College, Vellore,** India. d Department of Pharmacology, Swamy Vivekanandha College of Pharmacy, Namakkal, India. e Department of Clinical and Experimental Pharmacology, Calcutta School of Tropical Medicine, Kolkata, India. f Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, Canada. The nature of addiction depends on various factors. The tendency to have already	**INT**	**JAN TO JUN**	**PHARMACOLOGY, PSYCHIATRY**	**PMID:**28323526 **Impact Factor:** 1.234 **H-Index:**65

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	used several addictive substances and to seek high sensation experiences as a result of specific personality traits may lead to extreme and peculiar forms of addictions. Even belonging to specific social and cultural background may lead to such forms of addiction such as intentional snake bite and willful envenomation. In this article, we have discussed the peculiarities and practical insight of such addiction to snake venom. The possible molecular mechanism behind such venom-mediated reinforcement has also been highlighted. Finally, we have stressed upon the treatment and de-addiction measures.				
128.	Das, S., Dey, J. K., Prabhu Ss, N., David, S., Kumar, A., Braganza, D. and Shanthi Fx, M. Association Between 5-HTR2C -759C/T (rs3813929) and -697G/C (rs518147) Gene Polymorphisms and Risperidone-Induced Insulin Resistance Syndrome in an Indian Population J Clin Pharmacol; 2017, **Address:** Department of Pharmacology and Clinical Pharmacology, **Christian Medical College, Vellore,** India. Department of Haematology, **Christian Medical College, Vellore,** India. Department of Psychiatry, **Christian Medical College, Vellore,** India. This study was performed to examine the association of 2 functional polymorphisms of the promoter region of the serotonin 5-HTR2C receptor gene: -759C/T (rs3813929) and -97G/C (rs518147) with risperidone-induced insulin resistance syndrome in an Indian population. In this case-control study, 52 adult patients of either sex, having no insulin resistance syndrome before initiating treatment, who were previously drug naive and who received risperidone monotherapy for >/=1 year, were recruited in 2 arms. Of them, 26 had risperidone-induced insulin resistance syndrome, and 26 did not have risperidone-induced insulin resistance syndrome. Polymerase chain reaction and DNA sequencing were performed. Multiple logistic regression analysis was performed, and adjusted odds ratio (AOR) was calculated. The polymorphisms did not deviate from Hardy-Weinberg equilibrium (P > .05). For both rs3813929 and rs518147, the variant (AOR 3.95, 95% CI 0.86-21.9 and AOR 4.12, 95% CI 0.88-23.23, respectively) and the heterozygous (AOR 5.21, 95% CI 0.7-61.38 and AOR 4.26, 95% CI 0.76-31.22, respectively) alleles were associated with risperidone-induced insulin resistance syndrome. The other factors associated with risperidone-induced insulin resistance syndrome were male sex, history of risk factors (ischemic heart disease, diabetes mellitus, or stroke) in family, risperidone dose, pretreatment	**INT**	**JUL TO DEC**	**PHARMACOLOGY, HAEMATOLOGY, PSYCHIATRY**	**PMID:**28940543 **Impact Factor:** 2.812 **H-Index:**101

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	mean arterial blood pressure, fasting blood glucose, and triglycerides. This is the first study conducted in an Indian population to demonstrate that the 2 functional polymorphisms in the 5-HTR2C gene (rs3813929 and rs518147) are associated with risperidone-induced insulin resistance syndrome.				
129.	Das, S., Dey, J. K., Sen, S. and Mukherjee, R. Efficacy and Safety of Patiromer in Hyperkalemia J Pharm Pract; 2017, 897190017692921 **Address:** 1 Department of Pharmacology and Clinical Pharmacology, **Christian Medical College, Vellore,** Tamil Nadu, India. 2 Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India. **BACKGROUND:** Patients at the highest risk of hyperkalemia are those with chronic kidney disease (CKD) stages 3 and 4. **OBJECTIVE:** To evaluate the efficacy and safety of patiromer in hyperkalemia in patients with heart failure or CKD. **METHODS:** The Cochrane Renal Group's Specialized Register was searched through contact with the Trials' Search Coordinator. We aimed at including randomized controlled trials with patiromer in patients with developed or risks of developing hyperkalemia, comparing against an active comparator or placebo. Three studies matched our inclusion and exclusion criteria, which we included in the meta-analysis. All-cause mortality, reduction in hospitalization, episodes of hypokalemia or hyperkalemia, and cardiovascular and gastrointestinal adverse events during the treatment period were our primary outcomes. Serial change in serum potassium (K+) until end of treatment or follow-up during the trial period and all other reported adverse reactions during the treatment period were our secondary outcomes. Meta-analysis (RevMan version 5.3.5) and descriptive statistics were used. **RESULTS:** There was a non-significant improvement in all-cause mortality and serious cardiovascular events with patiromer than placebo. Hospitalization data were unavailable. Although serious gastrointestinal events were more common with placebo, there was a significant reduction (P = .02) in the risk of non-serious gastrointestinal events with placebo. Patiromer lowered serum K+ more than placebo, and there were more patients developing hyperkalemia with placebo.	**INT**	**JAN TO JUN**	**PHARMACOLOGY, BIOSTATISTICS**	**PMID:**28402156 **Impact Factor:**1.160 **H-Index:**19

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	High-dose patiromer was associated with better efficacy in some parameters but with more adverse events. **CONCLUSION:** Although patiromer seems promising, more trials with active comparator are essential to finalize its indication and use in hyperkalemia.				
130.	Das, S., Fleming, D. H., Mathew, B. S., Winston, A. B., Prabhakar, A. T. and Alexander, M. Determination of serum carbamazepine concentration using dried blood spot specimens for resource-limited settings Hosp Pract (1995); 2017, 45 (2): 46-50 **Address:** a Department of Pharmacology and Clinical Pharmacology, **Christian Medical College, Vellore,** Tamil Nadu, India. b Department of Neurological Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. **OBJECTIVES:** Carbamazepine (CBZ) is a commonly used anti-epileptic in rural hospitals in India. These hospitals lack the facilities to measure CBZ concentration; however, in larger hospitals this is performed using high performance liquid chromatography (HPLC). Dried blood spot (DBS) represents a feasible matrix for safe transportation by post/courier. This study was to determine whether the concentration of CBZ in serum can be predicted from that measured in DBS using an inexpensive HPLC method and inexpensive standard filter paper. **METHODS:** CBZ in serum and DBS from 80 epileptic patients were measured using a validated HPLC assay. The data was then randomly divided into two groups; simple Deming regression was performed with the first group and validation was performed using the second. **RESULTS:** There was a good correlation between the serum and DBS concentrations (r = 0.932) in the first group. The regression equation obtained was: predicted serum concentration = DBS concentration x 0.83 + 1.09. In the validation group, the correlation between the predicted and actual serum concentrations was also good (r = 0.958), and the mean difference between them was only 0.28 mug/ml (p = 0.8062). The imprecision and bias in both the groups were acceptable. **CONCLUSION:** Using inexpensive materials, serum CBZ concentrations can be accurately predicted from DBS specimens. This method can be recommended for the therapeutic drug monitoring of CBZ in resource-limited settings.	**INT**	**JAN TO JUN**	**PHARMACOLOGY, NEUROLOGICAL SCIENCES**	**PMID:**28353375 **Impact Factor:**1.220 **H-Index:**14
131.	Das, S., More, A. R. and Iyadurai, R.	**NAT**	**JUL TO**	**MEDICINE,**	**PMID:**29564283

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Bilateral renal aspergillosis in an immunocompetent host J Family Med Prim Care; 2017, 6 (4): 873-875 **Address:** Department of Medicine, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Division of Critical Care, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Bilateral primary renal aspergillosis is rare in immunocompetent hosts. The clinical presentation of Aspergillus pyelonephritis is similar to that of bacterial pyelonephritis. Here, we present an immunocompetent patient with primary bilateral renal abscesses due to Aspergillus fumigatus.		**DEC**	**CRITICAL CARE UNIT**	**PMC ID:**5848418 **Impact Factor:** 0.670 **H-Index:** NA
132.	David, D., Raghavendran, A., Goel, A., Bharath Kumar, C., Kodiatte, T. A., Burad, D., Abraham, P., Ramakrishna, B., Joseph, P., Ramachandran, J. and Eapen, C. E. Risk factors for non-alcoholic fatty liver disease are common in patients with non-B non-C hepatocellular carcinoma in India Indian J Gastroenterol; 2017, 36 (5): 373-379 **Address:** Department of Gastroenterology, Division of Gastrointestinal Sciences, **Christian Medical College and Hospital, Vellore**, 632 004, India. deepudavid@gmail.com. Department of Virology, **Christian Medical College and Hospital, Vellore**, 632 004, India. Department of Hepatology, **Christian Medical College and Hospital, Vellore**, 632 004, India. Department of Gastroenterology, Division of Gastrointestinal Sciences, **Christian Medical College and Hospital, Vellore**, 632 004, India. Department of Pathology, **Christian Medical College and Hospital, Vellore**, 632 004, India. Department of Surgery, **Christian Medical College and Hospital, Vellore**, 632 004, India. AIM OF THE STUDY: The aim of the study was to analyze the prevalence of risk factors for non-alcoholic fatty liver disease (NAFLD) in patients with non-B non-C hepatocellular carcinoma (HCC). METHODS: Between June 2012 and November 2014, patients with HCC, negative for hepatitis B surface antigen and hepatitis C	**NAT**	**JUL TO DEC**	**GASTROINTESTINAL SCIENCES, CLINICAL VIROLOGY, HEPATOLOGY, PATHOLOGY, SURGERY**	**PMID:**28975595 **Impact Factor:**0.690 **H-Index:**34

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	virus antibody, were included in this study. All patients were assessed for risk factors for NAFLD such as diabetes mellitus (DM), hypertension, dyslipidemia, metabolic syndrome, and obesity. RESULTS: Forty-seven patients with non-B non-C HCC (males, 37; age, 60+/-10 years; mean+/-SD) were studied. Model for end-stage liver disease score was 11+/-4. Twenty-five patients were in Child's class A. History of significant alcohol intake was noted in 11 (23%) patients. Prevalence of risk factors for NAFLD were obesity 24 (51%), DM 22 (47%), metabolic syndrome 21 (45%), hypertension 16 (34%), and dyslipidemia 13 (28%). Forty (85%) patients had at least one risk factor for NAFLD. The mean duration of at least one NAFLD risk factor was 7.5 years, prior to diagnosis of HCC. Thirteen (28%) patients were positive for anti-HBc; however, none of the study patients had detectable HBV DNA in blood. CONCLUSIONS: Eighty-five percent of the patients with non-B non-C HCC had at least one risk factor for NAFLD. None of the study patients had occult hepatitis B infection. NAFLD is emerging as the major etiological contributing factor for non-B non-C HCC in India.				
133.	David, J. A., Sankarapandian, V., Christopher, P. R., Chatterjee, A. and Macaden, A. S. Injected corticosteroids for treating plantar heel pain in adults Cochrane Database Syst Rev; 2017, 6 CD009348 **Address:** Department of Physical Medicine and Rehabilitation, **Christian Medical College,** Ida Scudder Road, Vellore, Tamil Nadu, India, 632004. LCECU, **Christian Medical College, Vellore,** Tamil Nadu, India, 632002. Family Medicine, **Christian Medical College, Vellore,** Tamilnadu, India, 632004. Stroke and Rehabilitation Medicine, Raigmore Hospital (NHS Highland), Inverness, UK, IV2 3UJ.☐☐**BACKGROUND:** Plantar heel pain, commonly resulting from plantar fasciitis, often results in significant morbidity. Treatment options include nonsteroidal anti-inflammatory drugs (NSAIDs), orthoses, physical therapy, physical agents (e.g. extracorporeal shock wave therapy (ESWT), laser) and invasive procedures including steroid injections. **OBJECTIVES:** To assess the effects (benefits and harms) of injected corticosteroids for treating plantar heel pain in adults. SEARCH **METHODS:** We searched the Cochrane Bone, Joint and Muscle Trauma Group Specialised Register, the Cochrane Central Register of Controlled Trials (the Cochrane Library), MEDLINE, Embase, CINAHL, clinical trials	**INT**	**JAN TO JUN**	**PHYSIOTHERAPY, LCECU, FAMILY MEDICINE,**	**PMID:**28602048 **Impact Factor:**6.124 **H-Index:**189

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	registries and conference proceedings. Latest search: 27 March 2017. SELECTION CRITERIA: Randomised and quasi-randomised trials of corticosteroid injections in the treatment of plantar heel pain in adults were eligible for inclusion. **DATA COLLECTION AND ANALYSIS:** At least two review authors independently selected studies, assessed risk of bias and extracted data. We calculated risk ratios (RRs) for dichotomous outcomes and mean differences (MDs) for continuous outcome measures. We used a fixed-effect model unless heterogeneity was significant, when a random-effects model was considered. We assessed the overall quality of evidence for individual outcomes using the GRADE approach. **MAIN RESULTS:** We included a total of 39 studies (36 randomised controlled trials (RCTs) and 3 quasi-RCTs) that involved a total of 2492 adults. Most studies were small (median = 59 participants). Participants' mean ages ranged from 34 years to 59 years. When reported, most participants had heel pain for several months. The trials were usually conducted in outpatient specialty clinics of tertiary care hospitals in 17 countries. Steroid injection was given with a local anaesthetic agent in 34 trials. Follow-up was from one month to over two years. With one exception, trials were assessed at high risk of bias in one or more domains, mostly relating to lack of blinding, including lack of confirmation of allocation concealment. With two exceptions, we rated the available evidence as very low quality, implying in each case that we are 'very uncertain about the estimate'.The 39 trials covered 18 comparisons, with six of the seven trials with three or four groups providing evidence towards two comparisons.Eight trials (724 participants) compared steroid injection versus placebo or no treatment. Steroid injection may lead to lower heel pain visual analogue scores (VAS) (0 to 100; higher scores = worse pain) in the short-term (< 1 month) (MD -6.38, 95% CI -11.13 to -1.64; 350 participants; 5 studies; I(2) = 65%; low quality evidence). Based on a minimal clinically significant difference (MCID) of 8 for average heel pain, the 95% CI includes a marginal clinical benefit. This potential benefit was diminished when data were restricted to three placebo-controlled trials. Steroid injection made no difference to average heel pain in the medium-term (1 to 6 months follow-up) (MD -3.47, 95% CI -8.43 to 1.48; 382 participants; 6 studies; I(2) = 40%; low quality evidence). There was very low quality evidence for no effect on function in the medium-term and for an absence of serious adverse events (219 participants, 4 studies). No studies reported on other adverse events, such as post-injection pain, and on return to previous activity. There was very low quality evidence for fewer treatment failures (defined variously as persistent heel pain at 8 weeks, steroid injection at 12 weeks, and unrelieved pain at 6 months) after steroid injection.The				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	available evidence for other comparisons was rated as very low quality. We are therefore very uncertain of the estimates for the relative effects on people with heel pain of steroids compared with other interventions in:1. Tibial nerve block with anaesthetic (2 trials); orthoses (4 trials); oral NSAIDs (2 trials); and intensive physiotherapy (1 trial).2. Physical modalities: ESWT (5 trials); laser (2 trials); and radiation therapy (1 trial).3. Other invasive procedures: locally injectable NSAID (1 trial); platelet-rich plasma injections (5 trials); autologous blood injections (2 trials); botulinum toxin injections (2 trials); cryopreserved human amniotic membrane injection (1 trial); localised peppering with a needle (1 trial); dry needling (1 trial); and mini scalpel needle release (1 trial).We are also uncertain about the estimates from trials testing different techniques of local steroid injection: ultrasonography-guided versus palpation-guided (5 trials); and scintigraphy-guided versus palpation-guided (1 trial).An exploratory analysis involving pooling data from 21 trials reporting on adverse events revealed two ruptures of plantar fascia (reported in 1 trial) and three injection site infections (reported in 2 trials) in 699 participants allocated to steroid injection study arms. Five trials reported a total of 27 participants with less serious short-term adverse events in the 699 participants allocated steroid injection study arms. Reported treatments were analgesia, ice or both. Given the high risk of selective reporting for these outcomes and imprecision, this evidence was rated at very low quality. AUTHORS' **CONCLUSIONS:** We found low quality evidence that local steroid injections compared with placebo or no treatment may slightly reduce heel pain up to one month but not subsequently. The available evidence for other outcomes of this comparison was very low quality. Where available, the evidence from comparisons of steroid injections with other interventions used to treat heel pain and of different methods of guiding the injection was also very low quality. Although serious adverse events relating to steroid injection were rare, these were under-reported and a higher risk cannot be ruled out.Further research should focus on establishing the effects (benefits and harms) of injected steroids compared with placebo in typical clinical settings, subsequent to a course of unsuccessful conservative therapy. Ideally, this should be preceded by research, including patient involvement, aimed to obtain consensus on the priority questions for treating plantar heel pain.				
134.	David, T. and Tharyan, P. Systematic reviews of diagnostic tests: A primer	**NAT**	**JAN TO JUN**	**MEDICINE UNIT II, PSYCHIATRY UNIT II**	**PMID:**28303811 **Impact Factor:** 1.149 **H-Index:**38

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Indian J Med Microbiol; 2017, 35 (1): 8-9 **Address:** Department of Medicine - Unit II, **Christian Medical College, Vellore,** Tamil Nadu, India.☐Department of Phychiatry - Unit II, South Asian Cochrane Network, **Christian Medical College, Vellore,** Tamil Nadu, India.				
135.	Del Brutto, O. H., Nash, T. E., White, A. C., Jr., Rajshekhar, V., Wilkins, P. P., Singh, G., Vasquez, C. M., Salgado, P., Gilman, R. H. and Garcia, H. H. Revised set of diagnostic criteria for neurocysticercosis (in reply to Garg and Malhotra) J Neurol Sci; 2017, 373 350-351 **Address:** School of Medicine, Universidad Espiritu Santo - Ecuador, Guayaquil, Ecuador. Electronic **Address:** oscardelbrutto@hotmail.com.☐Laboratory of Parasitic Diseases, National Institute of Allergy and Infectious Diseases, National Institute of Health, Bethesda, MD, United States.☐Infectious Disease Division, Department of Internal Medicine, University of Texas Medical Branch, Galveston, TX, United States.☐Department of Neurological Sciences, **Christian Medical College Hospital, Vellore,** India. Parasitology Services, Marathon, Fl, United States.☐Department of Neurology, Dayanand Medical College, Ludhiana, India.☐Department of Neurosurgery, Instituto Nacional de Ciencias Neurologicas, Lima, Peru.☐Neuroimaging Unit, National Institute of Neurology and Neurosurgery Manuel Velasco Suarez, Mexico City, Mexico.☐Department of International Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States.☐Center for Global Health, Tumbes and the Department of Microbiology, School of Sciences, Universidad Peruana Cayetano Heredia, Peru; Cysticercosis Unit, Instituto Nacional de Ciencias Neurologicas, Lima, Peru.	**INT**	**JAN TO JUN**	**NEUROLOGICAL SCIENCES**	**PMID:**28011076 **Impact Factor:**2.295 **H-Index:**32
136.	Del Brutto, O. H., Nash, T. E., White, A. C., Jr., Rajshekhar, V., Wilkins, P. P., Singh, G., Vasquez, C. M., Salgado, P., Gilman, R. H. and Garcia, H. H. Revised diagnostic criteria for neurocysticercosis J Neurol Sci; 2017, 372 202-210 **Address:** School of Medicine, Universidad Espiritu Santo - Ecuador, Guayaquil, Ecuador. Laboratory of Parasitic Diseases, National Institute of Allergy and	**INT**	**JAN TO JUN**	**NEUROLOGICAL SCIENCES**	**PMID:**28017213 **Impact Factor:**2.295 **H-Index:**32

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Infectious Diseases, National Institute of Health, Bethesda, MD, United States. Infectious Disease Division, Department of Internal Medicine, University of Texas Medical Branch, Galveston, TX, United States. Department of Neurological Sciences, **Christian Medical College Hospital, Vellore,** India. Parasitology Services, Marathon, FL, United States. Department of Neurology, Dayanand Medical College, Ludhiana, India. Department of Neurosurgery, Instituto Nacional de Ciencias Neurologicas, Lima, Peru. Neuroimaging Unit, National Institute of Neurology and Neurosurgery Manuel Velasco Suarez, Mexico City, Mexico. Department of International Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States. Center for Global Health, Tumbes, Peru; Department of Microbiology, School of Sciences, Universidad Peruana Cayetano Heredia, Peru; Cysticercosis Unit, Instituto Nacional de Ciencias Neurologicas, Lima, Peru. Electronic **Address:** hgarcia@jhsph.edu. **BACKGROUND:** A unified set of criteria for neurocysticercosis (NCC) has helped to standardize its diagnosis in different settings. **METHODS:** Cysticercosis experts were convened to update current diagnostic criteria for NCC according to two principles: neuroimaging studies are essential for diagnosis, and all other information provides indirect evidence favoring the diagnosis. Recent diagnostic advances were incorporated to this revised set. **RESULTS:** This revised set is structured in absolute, neuroimaging and clinical/exposure criteria. Absolute criteria include: histological confirmation of parasites, evidence of subretinal cysts, and demonstration of the scolex within a cyst. Neuroimaging criteria are categorized as major (cystic lesions without scolex, enhancing lesions, multilobulated cysts, and calcifications), confirmative (resolution of cysts after cysticidal drug therapy, spontaneous resolution of single enhancing lesions, and migrating ventricular cysts on sequential neuroimaging studies) and minor (hydrocephalus and leptomeningeal enhancement). Clinical/exposure criteria include: detection of anticysticercal antibodies or cysticercal antigens by well-standardized tests, systemic cysticercosis, evidence of a household Taenia carrier, suggestive clinical manifestations, and residency in endemic areas. Besides patients having absolute criteria, definitive diagnosis can be made in those having two major neuroimaging criteria (or one major plus one confirmative criteria) plus exposure. For patients presenting with one major and one minor neuroimaging criteria plus exposure, definitive diagnosis of NCC requires the exclusion of confounding pathologies. Probable diagnosis is reserved for individuals presenting with one neuroimaging criteria plus strong evidence of exposure.				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	CONCLUSIONS: This revised set of diagnostic criteria provides simpler definitions and may facilitate its more uniform and widespread applicability in different scenarios.				
137.	Devanga Ragupathi, N. K., Muthuirulandi Sethuvel, D. P., Gajendiran, R., Daniel, J. L., Walia, K. and Veeraraghavan, B. First Indian report of IncX3 plasmid carrying blaNDM-7 in Escherichia coli from bloodstream infection: potential for rapid dissemination New Microbes New Infect; 2017, 17 65-68 **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore,** India. Division of Epidemiology and Communicable Diseases, Indian Council of Medical Research, New Delhi, India. Enterobacteriaceae with blaNDM-7 is only infrequently observed. Self-transmissible plasmids carrying the blaNDM gene increase the dissemination of carbapenem resistance in developing countries. This study investigates the whole genome sequence of a blaNDM-7-positive Escherichia coli. The isolate was an extended-spectrum beta-lactamase producer by combined disc diffusion test and carbapenemase producer by CarbaNP method. Sequencing results revealed the isolate as E. coli ST-167 with IncX3 plasmid carrying blaNDM-7 in addition to blaTEM-1 and blaCMY-42 genes. The identification of IncX3-blaNDM-7 combination is the first report in India where blaNDM-7 is known to cause higher resistance to carbapenems compared to its variants.	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY**	**PMID:**28337342 **Impact Factor:** NA **H-Index:**11
138.	Devanga Ragupathi, N. K., Muthuirulandi Sethuvel, D. P., Inbanathan, F. Y. and Veeraraghavan, B. Accurate differentiation of Escherichia coli and Shigella serogroups: challenges and strategies New Microbes New Infect; 2018, 21 58-62 **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore,** India. Shigella spp. and Escherichia coli are closely related; both belong to the family Enterobacteriaceae. Phenotypically, Shigella spp. and E. coli share many common characteristics, yet they have separate entities in epidemiology and clinical disease,	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY**	**PMID:**29204286 **PMCID:**5711669 **Impact Factor:** NA **H-Index:**11

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	which poses a diagnostic challenge. We collated information for the best possible approach to differentiate clinically relevant E. coli from Shigella spp. We found that a molecular approach is required for confirmation. High discriminatory potential is seen with whole genome sequencing analysed for k-mers and single nucleotide polymorphism. Among these, identification using single nucleotide polymorphism is easy to perform and analyse, and it thus appears more promising. Among the nonmolecular methods, matrix-assisted desorption ionization-time of flight mass spectrometry may be applicable when data analysis is assisted with advanced analytic tools.				
139.	Dharmalingam, P., Marrapu, B., Voshavar, C., Nadella, R., Rangasami, V. K., Shaji, R. V., Abbas, S., Prasad, R. B., Kaki, S. S. and Marepally, S. An anti-oxidant, alpha-lipoic acid conjugated oleoyl-sn-phosphatidylcholineas a helper lipid in cationic liposomal formulations Colloids Surf B Biointerfaces; 2017, 152 133-142 **Address:** Centre for Stem Cell Research (CSCR), (A Unit of inStem, Bengaluru), **Christian Medical College Campus, Bagayam, Vellore** 632002, India. Centre for Lipid Research, CSIR-Indian Institute of Chemical Technology, Hyderabad 500 007, India; Academy of Scientific and Innovative Research, CSIR-Indian Institute of Chemical Technology, Tarnaka, Hyderabad 500007, India. BioSatva Technologies, Golnaka, Hyderabad 500013, India. Centre for Stem Cell Research (CSCR), (A Unit of inStem, Bengaluru), **Christian Medical College Campus, Bagayam, Vellore** 632002, India; Department of Haematology, **Christian Medical College Hospital, Vellore** 6302002, Tamilnadu, India. Centre for Lipid Research, CSIR-Indian Institute of Chemical Technology, Hyderabad 500 007, India. Electronic **Address:** Shivashanker.kaki@iict.res.in. Centre for Stem Cell Research (CSCR), (A Unit of inStem, Bengaluru), **Christian Medical College Campus, Bagayam, Vellore** 632002, India. Electronic **Address:** Srujankm@cmcvellore.ac.in Development of safe non-viral carrier systems for efficient intra-cellular delivery of drugs and genes hold promise in the area of translational research. Liposome based delivery systems have emerged as one of the attractive strategies for efficient delivery of drugs and nucleic acids. To this end, number of investigations was carried on liposomal formulations using lipids for achieving higher efficiency in	**INT**	**JAN TO JUN**	**CENTRE FOR STEM CELL RESEARCH, HAEMATOLOGY**	**PMID:**28103530 **Impact Factor:**3.887 **H-Index:**110

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	transfection with lower cytotoxicities. In our efforts to develop safer and efficient liposomal delivery systems, we synthesized a novel anti-oxidant lipid, alpha-lipoyl, oleyl-sn-phosphatidylcholine (LOPC) and used as a helper lipid in combination with a cationic amphiphile, Di-Stearyl Dihydroxy Ethyl Ammonium Chloride (DSDEAC) and 1,2-dioleoyl-sn-glycero-3-phosphocholine (DOPC) at varying concentrations of LOPC. DNA binding properties of the liposomal formulations (DS, DS LA1, DS LA2 and DS LA3) revealed that increasing the percentage of single aliphatic chain lipid LOPC, did not affect the DNA binding properties. But, transfection profiles of these liposomal formulations in 3 different cell lines (HeLa, HEK 293 and MCF7) showed difference in their efficacies. Results showed that optimal percentage of LOPC i.e. 25% in DSDEAC and DOPC at 1:1 molar ratio (DS LA1) enhanced transfection as compared to DSDEAC:DOPC alone. The endosomal escape studies with NBD labelled lysotracker and Rhodamine labelled liposomal formulations revealed that DS LA1 and DS LA2 facilitated the release of genetic cargo with a better efficiency than their counter parts. Reactive Oxygen Species (ROS), a key modulator of necroptosis were lowered with the treatment of DS LA1 than other liposomal formulations. Here in, we present a novel liposomal formulation using DSDEAC and DOPC at 1:1 molar ratio doped with 25-50% (mole ratio) LOPC as an efficient delivery system for enhanced transfection with quenching of ROS levels compared to formulations without LOPC.				
140.	Dharmalingam, P., Rachamalla, H. K. R., Lohchania, B., Bandlamudi, B., Thangavel, S., Murugesan, M. K., Banerjee, R., Chaudhuri, A., Voshavar, C. and Marepally, S. Green Transfection: Cationic Lipid Nanocarrier System Derivatized from Vegetable Fat, Palmstearin Enhances Nucleic Acid Transfections ACS Omega; 2017, 2 (11): 7892-7903 Address: Centre for Stem Cell Research (CSCR), (a Unit of inStem, Bengaluru), **Christian Medical College Campus,** Bagayam, Vellore 632002, India. Centre for Lipid Research, CSIR-Indian Institute of Chemical Technology, Hyderabad 500 007, India. Academy of Scientific and Innovative Research, CSIR-Indian Institute of Chemical Technology, Tarnaka, Hyderabad 500007, India. Cationic lipid-guided nucleic acid delivery holds great promise in gene therapy and genome-editing applications for treating genetic diseases. However, the major challenge lies in achieving therapeutically relevant efficiencies. Prior findings, including our own, demonstrated that asymmetry in the hydrophobic core of cationic lipids imparted superior transfection efficiencies. To this end, we have developed a lipid nanocarrier system with an asymmetric hydrophobic core (PS-Lips) derived from a mixture of fatty acids of food-grade palmstearin and compared its efficiency with symmetric palmitic acid-based nanocarrier system (P-Lip). PS-Lips exhibited superior transfection efficiencies with both plasmid DNA	**INT**	**JUL TO DEC**	**CENTRE FOR STEM CELL RESEARCH**	**PMID:30023566** **PMC ID:6044896** **Impact Factor:** NA **H-Index:**NA

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	(pDNA) and mRNA in multiple cultured cells than the control P-Lip. More importantly, PS-Lips exhibited 2-fold superior transfections with linear nucleic acid, green fluorescent protein (GFP) mRNA in hematopoietic cells, when compared with the commercial control lipofectamine RNAiMAX. PS-Lips was also found to be effective in delivering genome-editing tools (CRISPR/Cas9, sgRNA encoded pDNA with a reporter GFP construct) than P-Lip in HEK-293 cells. In the present study, we report that cationic liposomes derivatized from natural food-grade fat palmstearin with a natural hydrophobic core asymmetry are efficient in delivering both linear and circular nucleic acids. In particular, PS-Lips is efficient in delivering mRNA to hematopoietic cells. These findings can be further exploited in the genome-editing approach for treating beta-globinopathies.				
141.	Dharmalingam, Priya, Rachamalla, Hari Krishna R., Lohchania, Brijesh, Bandlamudi, Bhanuprasad, Thangavel, Saravanabhavan, Murugesan, Mohankumar K., Banerjee, Rajkumar, Chaudhuri, Arabinda, Voshavar, Chandrashekhar and Marepally, Srujan Green Transfection: Cationic Lipid Nanocarrier System Derivatized from Vegetable Fat, Palmstearin Enhances Nucleic Acid Transfections ACS Omega; 2017, 2 (11): 7892-7903 **Address:** Centre for Lipid Research, CSIR-Indian Institute of Chemical Technology, Hyderabad 500 007, India ‡ Centre for Stem Cell Research (CSCR), (a Unit of inStem, Bengaluru), **Christian Medical College Campus, Bagayam, Vellore** 632002, India § Academy of Scientific and Innovative Research, CSIR-Indian Institute of Chemical Technology, Tarnaka, Hyderabad 500007, India Cationic lipid-guided nucleic acid delivery holds great promise in gene therapy and genome-editing applications for treating genetic diseases. However, the major challenge lies in achieving therapeutically relevant efficiencies. Prior findings, including our own, demonstrated that asymmetry in the hydrophobic core of cationic lipids imparted superior transfection efficiencies. To this end, we have developed a lipid nanocarrier system with an asymmetric hydrophobic core (PS-Lips) derived from a mixture of fatty acids of food-grade palmstearin and compared its efficiency with symmetric palmitic acid-based nanocarrier system (P-Lip). PS-Lips exhibited superior transfection efficiencies with both plasmid DNA (pDNA) and mRNA in multiple cultured cells than the control P-Lip. More importantly, PS-Lips exhibited 2-fold superior transfections with linear nucleic acid, green fluorescent protein (GFP) mRNA in hematopoietic cells, when compared with the commercial control lipofectamine RNAiMAX. PS-Lips was also found to be effective in delivering genome-editing tools (CRISPR/Cas9, sgRNA encoded pDNA	**INT**	**JUL TO DEC**	**CENTRE FOR STEM CELL RESEARCH**	**NO PMID** **Impact Factor:** NA **H-Index:**NA

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	with a reporter GFP construct) than P-Lip in HEK-293 cells. In the present study, we report that cationic liposomes derivatized from natural food-grade fat palmstearin with a natural hydrophobic core asymmetry are efficient in delivering both linear and circular nucleic acids. In particular, PS-Lips is efficient in delivering mRNA to hematopoietic cells. These findings can be further exploited in the genome-editing approach for treating β-globinopathies.				
142.	Dheepak Selvaraj, Albert Kota, Prabhu Premkumar, Edwin Stephen, Sunil Agarwal Socio-demography and clinical profile of venous ulcers Wound Medicine 2017 Dec; 19_1-4	**INT**	**JUL-DEC**	VASCULAR SURGERY	**No PMID** **Impact Factor:** 0.217 **Indexed in** Embase, Scopus
143.	Dhiraj John Sonbare, **Deepak Thomas Abraham**, Simon Rajaratnam, Nihal Thomas, Marie Therese Manipadam, Rekha Pai, **Paul Mazhuvanchary Jacob** Re-operative Surgery for Pheochromocytoma-Paraganglioma: Analysis of 13 Cases from a Single Institution Indian Journal of Surgery; 2017, **Address:** 1.Department of Endocrine Surgery,Christian Medical CollegeVelloreIndia 2.Department of Endocrinology,Christian Medical CollegeVelloreIndia 3.Department of Pathology, Christian Medical CollegeVelloreIndia Re-operative adrenal surgery for recurrent pheochromocytoma/paraganglioma (PCC/PGL) is a therapeutic situation not commonly encountered. The recurrence rate of pheochromocytoma is estimated to be 6.1–16.5% of patients from published retrospective series; there are no reports from the Asian continent. A retrospective analysis of the departmental database was performed on patients who had undergone surgery for PCC/PGL from January 2004 to December 2014 at the **Christian Medical College Hospital, Vellore**, India. Among 99 patients identified during the study period, there were 14 recurrent tumours and 13 patients underwent re-operative surgery. We located eight recurrences on the right side, three on the left side and three in the midline. All 14 recurrences were functioning, and the biochemical analysis as well as imaging studies were positive in 13 of them. The mean duration to recurrence from the time of the primary surgery was 76.3 months (range 6–180 months). Of the 89 patients who underwent their first operation at our centre, 67.4% reported for follow-up for a mean period of 25 months (range 4–132 months). Four of these required re-	**NAT**	**JUL TO DEC**	**ENDOCRINE SURGERY, ENDOCRINOLOGY, PATHOLOGY**	**Indexed in PubMed**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	operation with a recurrence rate of 4.5% (4/89). The open approach was used for all but one of the recurrent tumours. Recurrence following surgery for PCC/PGL is a rarely studied though significant problem. Right adrenal tumour recurrences were most common, and all these recurrences were in the retrocaval region; this typical phenomenon may be dubbed the 'right retrocaval trap'. The reason for this was presumably due to difficult access and inadequate exposure of this area in open and laparoscopic surgery, resulting in incomplete dissection.				
144.	Dhiviya Prabaa, M. S., Naveen Kumar, D. R., Yesurajan, I. F., Anandan, S., Kamini, W. and Balaji, V. Identification of nonserotypeable Shigella spp. using genome sequencing: a step forward Future Sci OA; 2017, 3 (4): FSO229 **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore** - 632 004, India. Division of Epidemiology & Communicable Diseases, Indian Council of Medical Research, New Delhi - 110 029, India. Aim: Sequencing technology has replaced conventional methods in identifying and characterizing bacterial pathogens. We characterized 23 nonserotypeable Shigella that biochemically resembled Shigella spp. using whole genome sequencing. Materials & methods: Genome sequences were analyzed using online tools based on 16S rRNA, k-mer, gyrB sequences and analysis of O-antigen arrangement was done using PATRIC database for species identification. Sequence types, plasmid types, antimicrobial resistance and virulence genes were also investigated. Results: The SpeciesFinder using 16S rRNA sequences identified only 74% of the isolates, whereas KmerFinder and gyrB sequence analysis identified 100% of the isolates to its species level. Antimicrobial resistance, virulence and plasmid incompatibility groups were identified in all the isolates. Sequence types were determined. Conclusion: This study shows that whole genome sequencing approach for Shigella O-antigen analysis has greater discriminative power than other methods using different bioinformatics pipeline for identification of nonserotypeable Shigella.	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY**	**PMID:**29134117 **PMCID:**5674244 **Impact Factor:** NA **H-Index:**NA
145.	Divyashree, S. and Gupta, N. Splenic Abscess in Immunocompetent Patients Managed Primarily without Splenectomy: A Series of 7 Cases Perm J; 2017, 21	**INT**	**JUL TO DEC**	**CLINICAL IMMUNOLOGY AND RHEUMATOLO**	**PMID:**28746018 **PMCID:**5528801 **Impact Factor:**1.340

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Former Assistant Professor of Medicine at the MS Ramaiah Medical College in Banagluru, Karnataka, India. doc.divyashree@gmail.com. Fellow in Clinical Immunology & Rheumatology at the **Christian Medical College** in Vellore, India. drnikhilguptamamc@gmail.com. INTRODUCTION: Splenic abscesses are rare in immunocompetent adults. Despite advances in diagnosis and treatment, these abscesses are still potentially life threatening. Various factors have been reported to predispose otherwise immunocompetent adults to splenic abscesses. Splenectomy was once considered the "gold standard" treatment. However, the trend is shifting to a conservative approach. CASE DESCRIPTION: We describe seven cases of splenic abscess in immunocompetent adults, the cause of which ranged from tuberculosis to salmonella and was as rare as Plasmodium vivax. All the patients presented with fever (median duration = one month; range = one week to six years) and abdominal pain, and most also had weight loss. All patients were in their third to fifth decades of life. The patients were successfully treated with appropriate antibiotic therapy, after which they were clinically normal. DISCUSSION: A microbiological diagnosis of splenic abscess is of utmost importance. In this series, all patients underwent percutaneous aspiration. This was performed under radiologic guidance (either ultrasonography or computed tomography). Only one patient required diagnostic splenectomy. Irrespective of whatever surgical or nonsurgical drainage measures are employed, appropriate antibiotic therapy is the cornerstone of management. The dose and duration of antibiotic therapy depend on the causative organism and its sensitivity pattern.			**GY**	**H-Index:**14
146.	Doddabelavangala Mruthyunjaya M(1), Chapla A(1), Hesarghatta Shyamasunder A(1), Varghese D(1), Varshney M(1), Paul J(1), Inbakumari M(1), Christina F(1), Varghese RT(1), Kuruvilla KA(2), V Paul T(1), Jose R(3), Regi A(3), Lionel J(3), Jeyaseelan L(4), Mathew J(3), Thomas N(1). Comprehensive Maturity Onset Diabetes of the Young (MODY) Gene Screening in Pregnant Women with Diabetes in India. PLoS One. 2017 Jan 17;12(1):e0168656. doi: 10.1371/journal.pone.0168656. eCollection 2017. **Author information:** (1)Department of Endocrinology, Diabetes & Metabolism, **Christian Medical College,**	**INT**	**JAN TO JUN**	**ENDOCRINOLOGY, NEONATOLOGY OBSTETRICS AND GYNECOLOGY UNIT I, BIOSTATISTICS**	**PMID:** 28095440 **PMCID:PMC**5240948 **Impact Factor:** 2.806 **H-Index:**218

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Vellore, India. (2)Department of Neonatology, **Christian Medical College, Vellore,** India. (3)Department of Obstetrics and Gynaecology, **Christian Medical College, Vellore,** India. (4)Department of Biostatistics, **Christian Medical College, Vellore,** India. Pregnant women with diabetes may have underlying beta cell dysfunction due to mutations/rare variants in genes associated with Maturity Onset Diabetes of the Young (MODY). MODY gene screening would reveal those women genetically predisposed and previously unrecognized with a monogenic form of diabetes for further clinical management, family screening and genetic counselling. However, there are minimal data available on MODY gene variants in pregnant women with diabetes from India. In this study, utilizing the Next generation sequencing (NGS) based protocol fifty subjects were screened for variants in a panel of thirteen MODY genes. Of these subjects 18% (9/50) were positive for definite or likely pathogenic or uncertain MODY variants. The majority of these variants was identified in subjects with autosomal dominant family history, of whom five were in women with pre-GDM and four with overt-GDM. The identified variants included one patient with HNF1A Ser3Cys, two PDX1 Glu224Lys, His94Gln, two NEUROD1 Glu59Gln, Phe318Ser, one INS Gly44Arg, one GCK, one ABCC8 Arg620Cys and one BLK Val418Met variants. In addition, three of the seven offspring screened were positive for the identified variant. These identified variants were further confirmed by Sanger sequencing. In conclusion, these findings in pregnant women with diabetes, imply that a proportion of GDM patients with autosomal dominant family history may have MODY. Further NGS based comprehensive studies with larger samples are required to confirm these finding. DOI: 10.1371/journal.pone.0168656 Conflict of interest statement: The authors have declared that no competing interests exist.				
147.	Dr. Dheeraj Kattula, Dr. Stephen Amarjeet Jiwanmall, Dr. Nitin Kapoor, Dr. Mini Joseph, Dr. Thomas Paul, Dr. Simon Rajarathinam, Dr. Nihal Thomas, Dr. Vijay Abraham, Dr. Inian S Psychiatric burden in morbidly obese patients attending a Bariatric clinic in a tertiary care hospital in South India Indian Journal of Psychiatry; 2017, 59 (6): S221-S221	**NAT**	**JUL TO DEC**	**PSYCHIATRY, ENDOCRINOLOGY, BARIATRIC SURGERY**	**NO PMID** **WOS:**000392104500284 **Impact Factor:**0.810 **H-Index:** 20

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Christian Medical College, Vellore, Tamil Nadu, India. Email Id: askdheeraj@gmail.com *Introduction:* The World Health Organization believes that the world is in grip of an epidemic of Obesity. In addition to physical problems, psychiatric comorbidies like depression etc are reported in the obese. *Aims:* To estimate prevalence of psychiatric co-morbidity in obesity. *Methods:* In a cross-sectional study we evaluated 60 morbidly obese adult patients attending a multidisciplinary bariatric clinic in a tertiary care hospital. We assessed them for past and present psychiatric disorders. We also looked at quality of life, perceived current stress and social support.*Results:* The prevalence of psychiatric morbidity and its association with other variables like quality of life, current stress etc would be presented in the conference.Keywords: Obesity, Bariatric clinic, stress				
148.	Dr. Rahul Gorka, Dr. Elvino Barreto, Dr. Geley Ete Successful Autologous skin grafting in a patient of Severe Haemophilia Journal of Applied Hematology. March-2017 **Address:** In haemophilia-A patients, if the plasma concentration of factor VIII could be maintained at an optimum level, an open wound can be easily covered with split-thickness skin grafting without any significant bleeding or complication. Removing a split-thickness layer of skin should cause no more difficulty than in a normal individual. This can be attributed to normal bleeding time, prothrombin time, clot retraction and platelet count found in such patients. Skin grafting over non-healing raw areas in haemophiliac patients can significantly decrease the morbidity and length of hospitalization required, thereby, decreasing health expenditure. We present a case report of a haemophilia-A patient having raw area over lower limb, which was managed successfully by skin grafting.	**INT**	**JAN TO JUN**	**PLASTIC SURGERY UNIT-I**	Index Copernicus
149.	D'sa S, R., Nair, S., Joe Philip, V., Reji, K. K., Karuppusamy, R. and Joseph, M. Study of the factors at admission predicting the outcome in patients with attempted suicidal hanging Trop Doct; 2017, 49475517729065 **Address:** 1 Assistant Professor, Department of Critical Care, Medicine 30025 **Christian Medical College, Vellore** , India. 2 Professor, Department of Neurointensive Care, 30025 **Christian Medical College, Vellore** , India.	**INT**	**JUL TO DEC**	**CRITICAL CARE MEDICINE, NEUROINTENSITVE CARE, BIOSTATISTICS**	**PMID:**28862515 **Impact Factor:** 0.450 **H-Index:**28

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	3 Junior Registrar, 30025 **Christian Medical College, Vellore** , India. 4 Senior Demonstrator, Department of Biostatistics, 30025 **Christian Medical College, Vellore** , India. 5 Professor and Head, Department of Neurointensive Care, 30025 **Christian Medical College, Vellore** , India. Our study sought to identify factors at presentation which can predict the outcome after an attempted hanging. A retrospective analysis of patients over a 12-year period was carried out. A poor outcome was found in 17.8% and this could be predicted by the presence of myoclonus, a Glasgow coma motor score of </=3 or an abnormal chest radiograph.				
150.	Duraikannan, P., Saheer, S., Balamugesh, T. and Christopher, D. J. Rare cause of paradoxical worsening of pleural effusion in a patient with tuberculosis Lung India; 2017, 34 (2): 167-169 **Address:** Department of Pulmonary Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. A 33-year-old patient, Known case of chronic kidney disease on maintenance dialysis presented with complaints of low-grade fever and weight loss of 2 months duration. Computed tomography (CT) revealed bilateral mild pleural effusion with significant mediastinal and abdominal adenopathy. CT-guided fine-needle aspiration cytology of abdominal lymph nodes and bone marrow culture was suggestive of tuberculosis. The patient was started on four drug anti-tubercular therapy, post 6 weeks of initiation he developed new onset fever and chest X-ray revealed moderate right pleural effusion. Diagnostic thoracocentesis was suggestive of chylothorax. To the best of our knowledge, this is the first case report of chylothorax due to the paradoxical reaction in the HIV-negative tuberculous patient.	**NAT**	**JAN TO JUN**	**PULMONARY MEDICINE**	**PMID:**28360466 **Impact Factor:**0.530 **H-Index:**14
151.	Dutta, A. K., Reddy, V. D., Iyer, V. H., Unnikrishnan, L. S. and Chacko, A. Exploring current status of Helicobacter pylori infection in different age groups of patients with dyspepsia Indian J Gastroenterol; 2017, 36 (6): 509-513 Address: Department of Gastrointestinal Sciences, **Christian Medical College and Hospital,** Vellore, 632 004, India. akdutta1995@gmail.com.	**NAT**	**JUL TO DEC**	**GASTROINTESTINAL SCIENCES**	**PMID:29368191 Impact Factor:**0.690 **H-Index:**34

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Gastrointestinal Sciences, **Christian Medical College and Hospital,** Vellore, 632 004, India. Recent data from Asian countries including India has shown a significant decline in the frequency of peptic ulcer disease (PUD) compared to the past. H. pylori is considered the most important risk factor for PUD, and we aimed to explore the current frequency of H. pylori infection in different age groups of patients with dyspepsia. Patients >15 years of age with dyspeptic symptoms were prospectively recruited in this study from 2010 to 2014 after obtaining informed consent. Patients were divided into three age groups: 15-30 years, 31-50 years, and >50 years, and the minimum sample size required in the three groups with a power of 90% was 259, 256, and 188, respectively. All patients underwent upper gastrointestinal endoscopy; rapid urease test was done on gastric mucosal biopsy to detect H. pylori. The clinical, demographic features and socioeconomic status were recorded. The institute review board approved the study. We included 1000 patients with dyspepsia during the study period. Their mean age was 40.0+13.3 years, and 69.3% were males. Infection with H. pylori was detected in 419 (41.9%) patients. Among men, H. pylori was present in 45.7% while the frequency of infection in women was lower at 33.2% ($p < 0.001$). In the 15-30 years age group ($n = 303$), the frequency of infection was 42.6% while it was 48.3% in the 31-50 years group ($n = 350$) and 34.9% in the above 50 years group ($n = 347$). Male sex was a significant risk factor for H. pylori infection ($p < 0.001$). H. pylori infection, an important risk factor for PUD, was detected in less than half of the dyspeptic patients in the current study.				
152.	Dutta, A. M. I. T., Rebekah, Grace, Chowdhury, Sudipta D., Kg, Sajith, Sahu, Manoj, Subramani, Yuvaraj, Donapati, Viswanath R., Kurien, Reuben T., David, Deepu, Simon, Ebby G., Joseph, A. J. and Chacko, Ashok Mo1061 A Simple Symptom-Laboratory Test Based Pre-Endoscopy Risk Score for Upper Gastrointestinal Malignancy in Patients With Dyspepsia: A Five Year Prospective Study Gastrointestinal Endoscopy; 85 (5): AB410-AB411	**INT**	**JUL TO DEC**	**GASTROINTESTINAL SCIENCE**	**NO PMID** **WOS:**000403087401149 **Impact Factor:** 6.501 **H-Index:**179
153.	Dv, K., Gunasekaran, K., Mishra, A. K. and Iyyadurai, R. Disseminated tuberculosis presenting as cold abscess of the thyroid gland-a case report Oxf Med Case Reports; 2017, 2017 (9): omx049 **Address:** Department of Internal Medicine, **Christian Medical College, Vellore,** India. Tubercular involvement of the thyroid gland is a rare entity. Tuberculosis of thyroid gland can present as cold abscess, multinodular goitre, acute abscess or	**INT**	**JUL TO DEC**	**INTERNAL MEDICINE**	**PMID:**28928976 **PMCID:**5597852 **Impact Factor:**0.190 **H-Index:**1

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	generalized goitre. Clinically, these patients can be euthyroid, hypothyroid or hyperthyroid. Diagnosis is made by fine needle aspiration and demonstration of acid fast bacilli. Here, we report the case of a 46-year-old male who presented with disseminated extrapulmonary tuberculosis with obstructive hydrocephalus and cold abscess of the thyroid gland. He was managed with anti-tubercular therapy and ventriculoperitoneal shunt for hydrocephalus. This report emphasizes the clinical importance of the rare presentation of a common disease in an endemic region.				
154.	Eapen, C. E. and Nair, S. C. Potential danger of isolated platelet transfusion in patients with dengue infection Indian J Med Res; 2017, 145 (2): 158-160 **Address:** Department of Hepatology, **Christian Medical College, Vellore** 632 004, Tamil Nadu, India. Department of Transfusion Medicine, **Christian Medical College, Vellore** 632 004, Tamil Nadu, India.	**NAT**	**JAN TO JUN**	**HEPATOLOGY, TRANSFUSION MEDICINE**	**PMID:**28639589 **Impact Factor:** 1.532 **H-Index:**68
155.	Edwin Stephen, Albert Abhinay Kota, Sunil Agarwal, Dheepak Selvaraj, Prabhu Premkumar, Sam Ponraj, Vimalin Samuel Lateral marginal vein: Have we understood its significance? Ind J Vascular and Endovascular Surgery 2017 Apr-Jun; 4 (2)_43-45	**NAT**	**JAN-JUN**	VASCULAR SURGERY	**No PMID** **Indexed in:** ICI, Pubmed
156.	Edwin Stephen, Vimalin Samuel, Sunil Agarwal, Dheepak Selvaraj, Prabhu Premkumar Deep Vein Thrombosis is Not Uncommon In India **Indian Journal of Vascular and Endovascular Surgery**, Year 2017, Volume 4, Issue 3 [p. 92-96] **DOI:** 10.4103/ijves.ijves_33_17 Address Department of Vascular Surgery, **Christian Medical College, Vellore,** Vellore, India.	**NAT**	**JAN TO JUN**	**VASCULAR SURGERY**	**NO PMID** **Impact Factor:** NA **H-Index:**NA
157.	Edwin, Stephen Antithrombotics: Do we know Enough? **Indian Journal of Vascular and Endovascular Surgery**, Year 2017, Volume 4, Issue 3 [p. 84] **DOI:** 10.4103/ijves.ijves_34_17	**NAT**	**JAN TO JUN**	**VASCULAR SURGERY**	**NO PMID** **Impact Factor:** NA **H-Index:**NA

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: **Christian Medical College, Vellore,** India.				
158.	Ferri CP(1), Jacob KS(2). Dementia in low-income and middle-income countries: Different realities mandate tailored solutions. PLoS Med. 2017 Mar 28;14(3):e1002271. doi: 10.1371/journal.pmed.1002271. eCollection 2017 Mar. **Author information:** (1)Department of Psychobiology, Universidade Federal de São Paulo, Sao Paulo, Brazil. (2)Department of Psychiatry, **Christian Medical College, Vellore,** India. In a Perspective, Cleusa Ferri and K. S. Jacob discuss the assessment, recognition, and care of people living with dementia in low- and middle-income countries. DOI: 10.1371/journal.pmed.1002271	**INT**	**JAN TO JUN**	**PSYCHIATRY**	**PMID:** 28350797 **PMCID:** **PMC**5370095 **Impact Factor:** 11.862 **H-Index:**172
159.	Fini Ninan, John Mathew, Swetha Sara Philip, Deepa John, Debashish Danda, Sheeja Susan John Uveitis of spondyloarthritis in Indian subcontinent: a cross sectional study Int J Adv Med. 2017 Oct;4(5):1441-1446 Background: The seronegative spondyloarthritis (SpA) are known to have intimate association with ocular inflammatory disease. While anterior uveitis accounts for 50-92% of all cases of uveitis in the West, it ranges between 28 and 50% in the Asian countries. The aim of this study was to document the clinical profile of uveitis in patients with spondyloarthritis in the Indian subcontinent. Methods: In our hospital based cross sectional study, 166 patients fulfilling Assessment of SpondyloArthritis international Society' (ASAS) criteria for spondyloarthritis (SpA) were evaluated for evidence and nature of uveitis, including by a slit lamp bio microscope. The characteristics of Uveitis were defined as per the SUN (Standardization of Uveitis Nomenclature) Working Group criteria. 84.3% (140) of the patients were male.	**INT**	**JUL TO DEC**	**OPHTHALMOLOGY, RHEUMATOLOGY**	**Index Copernicus**

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Results: Ankylosing spondylitis was the commonest type of spondyloarthritis accounting for 69.3% patients. Evidence of past or present uveitis was found in 16.3% patients. Of the patients with uveitis 96.3% had anterior uveitis. 88.9% of the patients had redness of the eye, and 85.2% reported pain in the eye during an episode of uveitis. Mean duration of musculoskeletal symptoms prior to the diagnosis of SpA was 4.36 years. Of the 24 patients who could recall the course of uveitis 70.8% (17) had recurrent episodes. As a complication of uveitis 18.5% had cataract, and 14.8% had posterior synechiae. 78.3% patients were HLA-B27 positive. 19.2% of HLA-B27 positive patients had uveitis, whereas only 5.6% out of the 36 HLA-B27 negative patients had uveitis. Conclusions: The proportion of patients with uveitis in our study (16.3%) was considerably less than in other studies. The characteristics and profile of uveitis in our cohort of SpA patients from the Indian subcontinent were similar to those previously reported in literature.				
160.	Fischer, K., Poonnoose, P., Dunn, A. L., Babyn, P., Manco-Johnson, M. J., David, J. A., Van Der Net, J., Feldman, B., Berger, K., Carcao, M., De Kleijn, P., Silva, M., Hilliard, P., Doria, A., Srivastava, A. and Blanchette, V. Choosing outcome assessment tools in haemophilia care and research: a multidisciplinary perspective Haemophilia; 2017, 23 (1): 11-24 **Address:** Van Creveldkliniek, University Medical Center Utrecht, Utrecht, The Netherlands. Department of Orthopaedics, **Christian Medical College, Vellore,** Tamil Nadu, India. Division of Hematology and Oncology, Nationwide Children's Hospital and The Ohio State University, Columbus, OH, USA. Department of Medical Imaging, University of Saskatchewan and Saskatoon Health Region Royal University Hospital, Saskatoon, SK, Canada. Section of Hematology/Oncology/Bone Marrow Transplantation, Department of Pediatrics, University of Colorado Anschutz Medical Campus and Children's Hospital, Aurora, CO, USA. Department of PMR, **Christian Medical College, Vellore,** Tamil Nadu, India. Child Health Services, Child Development and Exercise Center, University Medical Center and Children's Hospital, Utrecht, The Netherlands. Division of Rheumatology, Department of Paediatrics and Child Health Evaluative Sciences, Research Institute, Hospital for Sick Children, University of Toronto, Toronto, ON, Canada. Division of	**INT**	**JAN TO JUN**	**PHYSIOTHERAPY, ORTHOPAEDICS, HAEMATOLOGY**	**PMID:**27633342 **Impact Factor:** 3.569 **H-Index:**79

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Haematology/Oncology, University Hospital of Munich, Munich, Germany. Division of Haematology/Oncology, Department of Paediatrics and Child Health Evaluative Sciences, Research Institute, Hospital for Sick Children, University of Toronto, Toronto, ON, Canada. Department of Rehabilitation, Nursing Science and Sports, and Van Creveldkliniek, University Medical Center Utrecht, Utrecht, The Netherlands. Department of Orthopaedic Surgery, Orthopaedic Institute for Children, David Geffen School of Medicine at UCLA, Los Angeles, CA, USA. Department of Rehabilitation, Hospital for Sick Children, University of Toronto, Toronto, ON, Canada. Department of Diagnostic Imaging, Research Institute, Hospital for Sick Children, University of Toronto, Toronto, ON, Canada. Department of Haematology, **Christian Medical College, Vellore,** Tamil Nadu, India. **INTRODUCTION:** The implementation of early long-term, regular clotting factor concentrate (CFC) replacement therapy ('prophylaxis') has made it possible to offer boys with haemophilia a near normal life. Many different regimens have reported favourable results, but the optimum treatment regimens have not been established and the cost of prophylaxis is very high. Both for optimizing treatment and reimbursement issues, there is a need to provide objective evidence of both short- and long-term results and benefits of prophylactic regimens. **AIMS:** This report presents a critical review of outcome measures for use in the assessment of musculoskeletal health in persons with haemophilia according to the International Classification of Functioning, Disability and Health (ICF). This framework considers structural and functional changes, activities and participation in a context of both personal and environmental factors. **METHODS:** Results were generated by a combination of a critical review of available literature plus expert opinion derived from a two day consensus conference between 48 health care experts from different disciplines involved in haemophilia assessment and care. Outcome tools used in haemophilia were reviewed for reliability and validity in different patient groups and for resources required. **RESULTS AND CONCLUSION:** Recommendations for choice of outcome tools were made according to the ICF domains, economic setting, and reason for use (clinical or research). The next step will be to identify a 'core' set of outcome measures for use in clinical care or studies evaluating treatment.				
161.	Fletcher, G. J., Raghavendran, A., Sivakumar, J., Samuel, P. and Abraham, P. Diagnostic reliability of Architect anti-HCV assay: Experience of a tertiary care hospital in India	**INT**	**JAN TO JUN**	**CLINICAL VIROLOGY, BIOSTATISTICS**	**PMID:**28657153 **Impact Factor:** 1.521 **H-Index:**40

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	J Clin Lab Anal; 2017, **Address:** Department of Clinical Virology, **Christian Medical College, Vellore,** India. Department of Bio-statistics, **Christian Medical College, Vellore,** India. **BACKGROUND & AIMS:** Anti-HCV assays are prone to false positive results. Thus, accurate detection of HCV infection is critical for the timely therapeutic management. This study ascertained the reliability of Architect anti-HCV assay (Abbott) and to estimate the agreement of this assay with Ortho HCV 3.0 ELISA Test System with Enhanced SAVe (Ortho), HCV Tri-dot (Tri-dot) and HCV-PCR in a tertiary care setting. **METHODS:** A total of 78 788 consecutive sera were routinely screened for anti-HCV antibodies using Architect. All repeatedly reactive anti-HCV sera (n=1000) and anti-HCV negative sera (n=300) were tested in Ortho and in Tri-dot assays. Representative proportions of sera (n=500) with various signal-to-cut-off (S/Co) ratio were also compared with HCV-PCR. **RESULTS:** When Architect was compared with Ortho, Tri-dot, and HCV-PCR, the level of agreement as assessed by kappa were .26, .16, and .27 respectively. Using Latent class analysis (LCA), we found that sensitivity and specificity were 100% and 36.1% for Architect, 93.8% and 100% for Ortho and 63.8% and 100% for Tri-dot respectively. The median S/CO ratio of Architect and Ortho anti-HCV assays were significantly different between HCV-PCR positive and negative results (P<.0001). Furthermore, Architect S/CO ratio of >8 showed higher accuracy indices in both anti-HCV assays. **CONCLUSIONS:** Architect can be used as a screening assay because of its high sensitivity, high throughput, and short turnaround time. However, S/Co ratios of >/=1 to <8 in Architect necessitates HCV PCR to identify current infection and or EIA to distinguish true positivity from false biological positivity.				
162.	Fok, H., Victor, P., Bradberry, S. and Eddleston, M. Novel methods of self-poisoning: repeated cardenolide poisoning after accessing Cerbera odollam seeds via the internet Clin Toxicol (Phila); 2017, 1-3 **Address:** a Edinburgh Clinical Toxicology, Royal Infirmary of Edinburgh , Edinburgh , UK. b Department of Pharmacology, Toxicology & Therapeutics , Centre for Cardiovascular Science, University of Edinburgh , Edinburgh , UK.	**INT**	**JUL TO DEC**	**PHARMACOLOGY**	**PMID:**28862038 **Impact Factor:**3.677 **H-Index:**79

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	c**Christian Medical College** , Vellore , India. d National Poisons Information Service - Birmingham, City Hospital , Birmingham , UK.				
163.	Fouzia, N. A., Edison, E. S., Lakshmi, K. M., Korula, A., Velayudhan, S. R., Balasubramanian, P., Abraham, A., Viswabandya, A., George, B., Mathews, V. and Srivastava, A. Long-term outcome of mixed chimerism after stem cell transplantation for thalassemia major conditioned with busulfan and cyclophosphamide Bone Marrow Transplant; 2017, **Address:** Department of Haematology, **Christian Medical College, Vellore,** India. Princess Margaret Hospital, Toronto, ON, Canada. Mixed chimerism (MC) occurs frequently after allogeneic hematopoietic stem cell transplantation (HSCT) for thalassemia major (TM) and may be associated with rejection. We report the outcome of MC in 132 TM patients conditioned with Busulphan/Cyclophosphamide, who had successful engraftment and had 1 year follow-up. Chimerism was first assessed at day +28, then every 3-9 months or more frequently if there was MC. If rejection was suspected, immunosuppression was stopped and donor-lymphocyte infusion (DLI) was given if there was no response. Among 132 patients, aged 7 years (range: 2-24), 46/132 (34.8%) had MC in the first year, 32/46 (69.6%) at day +28 and another 14 (30%) between day +28 and 1 year post HSCT. MC was quantified at level 1 (residual host chimerism (RHC) <10%) in 20 (43.5%), level II (RHC 10-25%) in 14 (30.4%) and level III (RHC >25%) in 12 (26.1%). On tapering immunosuppression, 15 (32.6%) developed acute GvHD and 8 (17.4%) had chronic GvHD with reversal to complete chimerism (CC). DLI was administered to 5/46 (10.9%), 1 evolved to CC but 4 rejected the graft. At median follow-up of 60 months (range: 16-172), 20/46 (43.5%) had CC, 18/46 (39.1%) had persistent MC with hemoglobin of 11.5 g/dL (range: 8.4-13.6), whereas 8 (17.4%) rejected the graft. Close monitoring and early intervention is needed with increasing recipient chimerism. Novel strategies are required for preventing graft rejection.Bone Marrow Transplantation advance online publication, 16 October 2017; doi:10.1038/bmt.2017.231.	**INT**	**JUL TO DEC**	**HAEMATOLOGY**	**PMID:**29035392 **Impact Factor:**3.874 **H-Index:**113
164.	Francis, D. V. and Rabi, S. Deplastination: Making plastinates histo-pathologically relevant Journal of the Anatomical Society of India; 2017,	**NAT**	**JUL TO DEC**	**ANATOMY**	**NO PMID** **NO PMCID** **SCOPUS**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	https://doi.org/10.1016/j.jasi.2017.12.007 **Address:Christian Medical College, Vellore,** TN, India Introduction: Deplastination is a process that reverses plastination. While the process is in its infancy, this study was designed to see if deplastinated tissues can be used for histopathological studies. Methods: In this study, a slice of liver tissue was split into two parts. The first half was processed, sectioned and stained with routine H&E staining while the other half was plastinated with S10 plastination technique and was deplastinated after 3 months using sodium methoxide as the deplastinating agent. It was latter stained with routine H&E. The slides were assessed qualitatively on parameters like tissue and cell identification, staining property, preservation of tissue architecture, visualisation of intracellular structures like nuclei, nucleoli, fat goblets etc. and presence of artefacts due to the process. Results: Identification of tissue was possible on the deplastinated slides. Intracellular structures like nuclei, nucleoli, fat droplets were identified in the deplastinated slides. Discussion: In this study, we have found that sodium methoxide and methanol form good deplastinating agents for small sections of tissue. Identification of endpoint of deplastination forms a crucial step in the process. © 2017 Anatomical Society of India.				**Impact Factor:** 0.067 **H-Index:**6
165.	Francis, M. R., Nohynek, H., Larson, H., Balraj, V., Mohan, V. R., Kang, G. and Nuorti, J. P. Factors associated with routine childhood vaccine uptake and reasons for non-vaccination in India: 1998-2008 Vaccine; 2017, **Address:** Department of Epidemiology, Health Sciences, Faculty of Social Sciences, University of Tampere, Tampere, Finland. Department of Health Security, National Institute for Health and Welfare (THL), Helsinki, Finland. Department of Infectious Disease Epidemiology, London School of Hygiene and Tropical Medicine, London, UK. Society for Applied Studies, Vellore, Tamil Nadu, India. Department of Community Health, **Christian Medical College, Vellore,** Tamil Nadu, India. Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Epidemiology, Health Sciences, Faculty of Social Sciences,	**INT**	**JUL TO DEC**	**COMMUNITY HEALTH, WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28844636 **Impact Factor:** 3.235 **H-Index:**151

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	University of Tampere, Tampere, Finland; Department of Health Security, National Institute for Health and Welfare (THL), Helsinki, Finland. Electronic address: Pekka.Nuorti@uta.fi. BACKGROUND: Despite almost three decades of the Universal Immunization Program in India, a little more than half the children aged 12-23months receive the full schedule of routine vaccinations. We examined socio-demographic factors associated with partial-vaccination and non-vaccination and the reasons for non-vaccination among Indian children during 1998 and 2008. METHODS: Data from three consecutive, nationally-representative, District Level Household and Facility Surveys (1998-99, 2002-04 and 2007-08) were pooled. Multinomial logistic regression was used to identify individual and household level socio-demographic variables associated with the child's vaccination status. The mother's reported reasons for non-vaccination were analyzed qualitatively, adapting from a previously published framework. RESULTS: The pooled dataset contained information on 178,473 children 12-23months of age; 53%, 32% and 15% were fully vaccinated, partially vaccinated and unvaccinated respectively. Compared with the 1998-1999 survey, children in the 2007-2008 survey were less likely to be unvaccinated (Adjusted Prevalence Odds Ratio (aPOR): 0.92, 95%CI=0.86-0.98) but more likely to be partially vaccinated (aPOR: 1.58, 95%CI=1.52-1.65). Vaccination status was inversely associated with female gender, Muslim religion, lower caste, urban residence and maternal characteristics such as lower educational attainment, non-institutional delivery, fewer antenatal care visits and non-receipt of maternal tetanus vaccination. The mother's reported reasons for non-vaccination indicated gaps in awareness, acceptance and affordability (financial and non-financial costs) related to routine vaccinations. CONCLUSIONS: Persisting socio-demographic disparities related to partial-vaccination and non-vaccination were associated with important childhood, maternal and household characteristics. Further research investigating the causal pathways through which maternal and social characteristics influence decision-making for childhood vaccinations is needed to improve uptake of routine vaccination in India. Also, efforts to increase uptake should address parental fears related to vaccination to improve trust in government health services as part of ongoing social mobilization and communication strategies.				
166.	Franklyn, J., George, S. V., Yacob, M., Abraham, V., Chandran, S., Sebastian, T. and Samarasam, I.	**INT**	**JAN TO JUN**	**SURGERY UNIT II**	**PMID:**28337364 **Impact Factor:**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Surgical Outcomes Associated with Operable Gastric Cancer in a Tertiary Care Indian Hospital J Gastric Cancer; 2017, 17 (1): 63-73 **Address:** Upper GI Surgery Unit, Department of General Surgery Unit 3, **Christian Medical College, Vellore,** India . **PURPOSE:** Data on operable gastric cancer from India is sparse. The purpose of this study was to investigate the clinical details, histopathological demographics, and 5-year overall survival (OS) and disease free survival (DFS) associated with operable, non-metastatic gastric cancer in a dedicated upper gastrointestinal (GI) surgical unit in India. **MATERIALS AND METHODS:** Data for patients diagnosed with operable gastric cancer between January 2006 and December 2014 were retrospectively analyzed. Data were collected from electronic hospital records in addition to mail and telephonic interviews when possible. **RESULTS:** A total of 427 patients were included. The tumor was located in the pyloro-antral region in 263 patients (61.7%). Subtotal gastrectomy was performed in 291 patients and total gastrectomy in 136 patients. Tumor stage classification revealed 43 patients (10.0%) with stage I, 40 patients (9.4%) with stage IIA, 59 patients (13.9%) with stage IIB, 76 patients (17.8%) with stage IIIA, 96 patients (22.5%) with stage IIIB, and 113 patients (26.4%) with stage IIIC disease. Follow-up data were available for 71.6% of the patients with a mean duration of 32.4 months. Five-year DFS and OS were 39% and 59%, respectively. **CONCLUSIONS:** Despite presenting at an advanced stage, the 5-year DFS and OS of patients with operable gastric cancer treated at a dedicated upper GI unit of a tertiary care center in India was good.				2.370 **H-Index:**18
167.	Franklyn, J., Janakiraman, R., Tirkey, A. J., Thankachan, C. and Muthusami, J. Oral Verrucous Carcinoma: Ten Year Experience from a Tertiary Care Hospital in India Indian J Med Paediatr Oncol; 2017, 38 (4): 452-455 **Address:** Department of General Surgery Unit 1 (Including Head and Neck Surgery), Paul Brand Building, **Christian Medical College, Vellore,** Tamil Nadu, India. Background: Verrucous carcinoma of the oral cavity (OVC) is an uncommon variant	**NAT**	**JAN TO JUN**	**GENERAL SURGERY UNIT I, HEAD AND NECK SURGERY**	**PMID:**29333011 **PMC ID:**5759063

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	of oral squamous cell carcinoma (OSCC). The clinical presentation and surgical outcomes of OVC are unique; however, the management protocols for OVC are largely extrapolated from OSCC. Objectives: The aim is to study the clinical, histopathological demographics, and outcome of OVC at a tertiary care referral hospital in South India. To study the need for lymph node dissection and the role of adjuvant therapy for close resection margins. Materials and Methods: A retrospective review of all patients diagnosed to have OVC between January 2005 and April 2015 was undertaken. Data were collected from hospital records and telephonic interview when possible. Results: Thirty patients were diagnosed to have OVC. The most common site of the presentation was the buccal mucosa. Twenty-three patients had wide local excision of the primary tumor and seven patients had neck dissection as well. None of the patients who underwent neck dissection had node-positive disease pathologically. The margins were considered close in nine patients, only one of these patients received adjuvant radiation therapy; despite among the patients with close resection margins, there was no recurrence or disease-related mortality. Among the thirty patients, there was only one patient who had recurred locally and there was no disease associated mortality. Conclusions: OVC is a unique variant of OSCC which has a good prognosis. Routine lymphadenectomy can be avoided.				
168.	Franklyn, J., Varghese, G., Mittal, R., Rebekah, G., Jesudason, M. R. and Perakath, B. A Prospective randomised controlled trial comparing early post-operative complications in patients undergoing loop colostomy with and without a stoma rod Colorectal Disease; 2017, 19 (7): 675-680 **Address:** Department of Surgery Unit 2(Colorectal Surgery), **Christian Medical College, Vellore,** 632004, Tamil Nadu, India. Department of biostatistics, **Christian Medical College, Vellore,** 632002, Tamil Nadu, India. Consultant Surgeon, Dr. Gray's Hospital, Elgin, IV30 6BZ. **AIM:** A stoma rod or bridge has been traditionally placed under the bowel loop while constructing loop colostomies. This is believed to prevent stomal retraction and provide better faecal diversion. However, the rod can cause complications such	**INT**	**JAN TO JUN**	**SURGERY UNIT II (COLORECTAL), BIOSTATISTICS**	**PMID:**28067986 **Impact Factor:**2.689 **H-Index:**70

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	as mucosal congestion, oedema and necrosis. This single centre prospective randomized controlled trial compared outcomes after loop colostomy creation with and without a supporting stoma rod. The primary outcome studied was stoma retraction rate, and other stoma related complications were studied as secondary outcomes. **METHODS:** One hundred and fifty one patients were randomly allotted into one of two arms, colostomy with or without a supporting rod. Post-operative complications such as retraction, muco-cutaneous separation, congestion and re-exploration for stoma related complications were recorded. **RESULTS:** There was no difference in the stoma retraction rate between the two arms; 8.1% in the rod arm and 6.6% in the no rod arm (p=0.719). Stomal necrosis (10.7 vs. 1.3% p=0.018), oedema (23 vs3.9% p=0.001), congestion (20.3 vs. 2.6% p=0.001) and re-admission rates (8.5% vs. 0% p=0.027) were significantly increased in the arm randomised to the rod. **CONCLUSIONS:** The stoma rod does not prevent stomal retraction. However, complication rates are significantly higher when a stoma rod is used. Routine use of a stoma rod for loop colostomy construction can be avoided.				
169.	Franklyn, Joshua, Gaikwad, Pranay, Lazarus, Emmanuel, Thomas, Alen and Muthusami, John Parotid abscess: A clinical analysis of 40 cases in a tertiary care hospital in India Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology; 2017, 29 (3): 189-192 **Address:** Department of General Surgery Unit 1 (including head and neck surgery), Paul Brand Building, **Christian Medical College, Vellore** 632004, Tamil Nadu, India Parotid abscess is a rare disease which has been associated with high mortality in the past. We present our experience in managing the disease in one of the largest series in published literature. Objectives To study the clinical, microbiological profile and management of parotid abscess in a tertiary care hospital. Methodology A retrospective review of all patients diagnosed to have parotid abscess between January 2006 and January 2016 was undertaken. Results Forty patients were diagnosed to have parotid abscess with a male:female ratio of 2:1. Brawny induration without fluctuation was the most common presentation. Nine patients developed parotid abscess while being treated in the intensive care unit for various medical illnesses. The majority of the patients had immunosuppression in the form of uncontrolled diabetes mellitus or systemic auto-immune disease. Thirty-three patients required incision and drainage, the remaining were treated with antibiotics	**INT**	**JAN TO JUN**	**SURGERY UNIT I**	**Indexed in PubMed, Scopus** **H Index: 8**

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	alone or with the aspiration of the pus. Staphylococcus, Streptococcus, and Klebsiella were the most common micro-organisms grown. The organisms were consistently sensitive to the first line antibiotics (Cloxacillin, Amoxicillin–clavulanic acid, and Gentamicin). Disease-associated mortality was present in one patient. Conclusion Parotid abscess is a disease that presents in immuno-compromised patients. First line antibiotics and surgical decompression of the tense parotid fascia and drainage of the abscess is the treatment of choice. Disease-specific mortality is low when appropriate treatment is instituted.				
170.	Gabriel, N., Samuel, R. and Jayandharan, G. R. Targeted delivery of AAV-transduced mesenchymal stromal cells to hepatic tissue for ex vivo gene therapy J Tissue Eng Regen Med; 2017, 11 (5): 1354-1364 **Address:** Department of Haematology, **Christian Medical College, Vellore,** Tamil Nadu, India. Centre for Stem Cell Research, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Biological Sciences and Bioengineering, Indian Institute of Technology, Kanpur, Uttar Pradesh, India. Adeno-associated virus (AAV)-mediated gene therapy holds great promise if challenges related to vector neutralization by pre-existing antibodies are circumvented. The use of autologous or allogeneic cells to shield the vector might offer the possibility of successful gene transfer in such a situation. In the present study, we evaluated the feasibility of AAV-transduced mesenchymal stromal cells (MSCs) as a vehicle for hepatic gene transfer in a murine liver injury model. In our initial studies to determine the most suitable vector, we observed that AAV1 (91%) and AAV6 (72%) serotypes are highly efficient in transducing MSCs. Subsequently, we generated a transient liver injury model to analyse the efficacy of MSCs homing to the liver, as well as their hepatic gene transfer efficiency; our data show that administration of acetaminophen (500 mg/kg) served as a cue for the homing of MSCs to the liver. Furthermore, sex-mismatched transplantation of AAV1-infected MSCs demonstrated a 3.5-fold (day 7) and 2.2-fold (day 28) higher hepatic gene transfer efficiency. To further corroborate this, we estimated the donor cell Y chromosome copies in the liver of recipient female mice. Our data revealed a 12.7-fold increase in average genome copies of male MSCs in the livers of recipient mice	**INT**	**JAN TO JUN**	**HEMATOLOGY, CENTRE FOR STEM CELL RESEARCH**	**PMID:**26053555 **Impact Factor:** 3.989 **H-Index:**50

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	with injury compared to control, 60 days after transplantation. However, in vivo administration of AAV-transduced MSCs in the presence of neutralization antibodies (intravenous immunoglobulin, IVIG) was not beneficial. This is possibly due to the clearance of transplanted MSCs by circulating IVIG and underscores the need to develop suitable in vivo models to study such a mode of gene transfer. Copyright (c) 2015 John Wiley & Sons, Ltd.				
171.	Gajalakshmi M, Rita Ruby Anbuselvi Albert Laryngeal aspergillosis - an unfamiliar clinical entity Med-ej, The Tamil Nadu Dr. MGR Medical University, Chennai, April 2017	**NAT**	**JAN TO JUN**	**ENT UNIT V**	**Not Indexed in PubMed**
172.	Gakidou, Emmanuela, Afshin, Ashkan, Abajobir, Amanuel Alemu, Abate, Kalkidan Hassen, Abbafati, Cristiana, Abbas, Kaja M., Abd-Allah, Foad, Abdulle, Abdishakur M., Abera, Semaw Ferede, Aboyans, Victor, Abu-Raddad, Laith J., Abu-Rmeileh, Niveen M. E., Abyu, Gebre Yitayih, Adedeji, Isaac Akinkunmi, Adetokunboh, Olatunji, Afarideh, Mohsen, Agrawal, Anurag, Agrawal, Sutapa, Kiadaliri, Aliasghar Ahmad, Ahmadieh, Hamid, Ahmed, Muktar Beshir, Aichour, Amani Nidhal, Aichour, Ibtihel, Aichour, Miloud Taki Eddine, Akinyemi, Rufus Olusola, Akseer, Nadia, Alahdab, Fares, Al-Aly, Ziyad, Alam, Khurshid, Alam, Noore, Alam, Tahiya, Alasfoor, Deena, Alene, Kefyalew Addis, Ali, Komal, Alizadeh-Navaei, Reza, Alkerwi, Ala'a, Alla, Francois, Allebeck, Peter, Al-Raddadi, Rajaa, Alsharif, Ubai, Altirkawi, Khalid A., Alvis-Guzman, Nelson, Amare, Azmeraw T., Amini, Erfan, Ammar, Walid, Amoako, Yaw Ampem, Ansari, Hossein, Anto, Josep M., Antonio, Carl Abelardo T., Anwari, Palwasha, Arian, Nicholas, Arnlov, Johan, Artaman, A., Aryal, Krishna Kumar, Asayesh, Hamid, Asgedom, Solomon Weldegebreal, Atey, Tesfay Mehari, Avila-Burgos, Leticia, Avokpaho, Euripide Frinel G. Arthur, Awasthi, Ashish, Azzopardi, Peter, Bacha, Umar, Badawi, Alaa, Balakrishnan, Kalpana, Ballew, Shoshana H., Barac, Aleksandra, Barber, Ryan M., Barker-Collo, Suzanne L., Barnighausen, Till, Barquera, Simon, Barregard, Lars, Barrero, Lope H., Batis, Carolina, Battle, Katherine E., Baune, Bernhard T., Beardsley, Justin, Bedi, Neeraj, Beghi, Ettore, Bell, Michelle L., Bennett, Derrick A., Bennett, James R., Bensenor, Isabela M., Berhane, Adugnaw, Berhe, Derbew Fikadu, Bernabe, Eduardo, Betsu, Balem Demtsu, Beuran, Mircea, Beyene, Addisu Shunu, Bhansali, Anil, Bhutta, Zulfiqar A., Bikbov, Boris, Birungi, Charles, Biryukov, Stan, Blosser, Christopher D., Boneya, Dube Jara, Bou-Orm, Ibrahim R., Brauer, Michael, Breitborde, Nicholas J. K., Brenner, Hermann, Brugha, Traolach S., Bulto, Lemma Negesa Bulto, Baumgarner, Blair R., Butt, Zahid A., Cahuana-Hurtado, Lucero, Cardenas, Rosario, Carrero, Juan Jesus, Castaneda-Orjuela, Carlos A., Catala-Lopez, Ferran, Cercy, Kelly, Chang, Hsing-Yi, Charlson, Fiona J., Chimed-Ochir, Odgerel, Chisumpa,	**INT**	**JUL TO DEC**	**PULMONARY MEDICINE**	**PMID:**28919119 **PMCID:**PMC5614451 **WOS:**000410630000006 **Impact Factor:** 47.831 **H-Index:**646

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Vesper Hichilombwe, Chitheer, Abdulaal A., Christensen, Hanne, **Christopher, Devasahayam Jesudas**, Cirillo, Massimo, Cohen, Aaron J., Comfort, Haley, Cooper, Cyrus, Coresh, Josef, Cornaby, Leslie, Cortesi, Paolo Angelo, Criqui, Michael H., Crump, John A., Dandona, Lalit, Dandona, Rakhi, Das Neves, Jose, Davey, Gail, Davitoiu, Dragos V., Davletov, Kairat, De Courten, Barbora, Degenhardt, Louisa, Deiparine, Selina, Dellavalle, Robert P., Deribe, Kebede, Deshpande, Aniruddha, Dharmaratne, Samath D., Ding, Eric L., Djalalinia, Shirin, Huyen Phuc, Do, Dokova, Klara, Doku, David Teye, Dorsey, E. Ray, Driscoll, Tim R., Dubey, Manisha, Duncan, Bruce Bartholow, Duncan, Sarah, Ebert, Natalie, Ebrahimi, Hedyeh, El-Khatib, Ziad Ziad, Enayati, Ahmadali, Endries, Aman Yesuf, Ermakov, Sergey Petrovich, Erskine, Holly E., Eshrati, Babak, Eskandarieh, Sharareh, Esteghamati, Alireza, Estep, Kara, Faraon, Emerito Jose Aquino, E Sa Farinha, Carla Sofia, Faro, Andre, Farzadfar, Farshad, Fay, Kairsten, Feigin, Valery L., Fereshtehnejad, Seyed-Mohammad, Fernandes, Joao C., Ferrari, Alize J., Feyissa, Tesfaye Regassa, Filip, Irina, Fischer, Florian, Fitzmaurice, Christina, Flaxman, Abraham D., Foigt, Nataliya, Foreman, Kyle J., Frostad, Joseph J., Fullman, Nancy, Furst, Thomas, Furtado, Joao M., Ganji, Morsaleh, Garcia-Basteiro, Alberto L., Gebrehiwot, Tsegaye Tewelde, Geleijnse, Johanna M., Geleto, Ayele, Gemechu, Bikila Lencha, Gesesew, Hailay Abrha, Gething, Peter W., Ghajar, Alireza, Gibney, Katherine B., Gill, Paramjit Singh, Gillum, Richard F., Giref, Ababi Zergaw, Gishu, Melkamu Dedefo, Giussani, Giorgia, Godwin, William W., Gona, Philimon N., Goodridge, Amador, Gopalani, Sameer Vali, Goryakin, Yevgeniy, Goulart, Alessandra Carvalho, Graetz, Nicholas, Gugnani, Harish Chander, Guo, Jingwen, Gupta, Rajeev, Gupta, Tanush, Gupta, Vipin, Gutierrez, Reyna A., Hachinski, Vladimir, Hafezi-Nejad, Nima, Hailu, Gessessew Bugssa, Hamadeh, Randah Ribhi, Hamidi, Samer, Hammami, Mouhanad, Handal, Alexis J., Hankey, Graeme J., Harb, Hilda L., Hareri, Habtamu Abera, Hassanvand, Mohammad Sadegh, Havmoeller, Rasmus, Hawley, Caitlin, Hay, Simon I., Hedayati, Mohammad T., Hendrie, Delia, Beatriz Heredia-Pi, Ileana, Hoek, Hans W., Horita, Nobuyuki, Hosgood, H. Dean, Hostiuc, Sorin, Hoy, Damian G., Hsairi, Mohamed, Hu, Guoqing, Huang, Hsiang, Huang, John J., Iburg, Kim Moesgaard, Ikeda, Chad, Inoue, Manami, Irvine, Caleb Mackay Salpeter, Jackson, Maria Delores, Jacobsen, Kathryn H., Jahanmehr, Nader, Jakovljevic, Mihajlo B., Jauregui, Alejandra, Javanbakht, Mehdi, Jeemon, Panniyammakal, Johansson, Lars R. K., Johnson, Catherine O., Jonas, Jost B., Jurisson, Mikk, Kabir, Zubair, Kadel, Rajendra, Kahsay, Amaha, Kamal, Ritul, Karch, Andre, Karema, Corine Kakizi, Kasaeian, Amir, Kassebaum, Nicholas J., Kastor, Anshul, Katikireddi, Srinivasa Vittal,				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Kawakami, Norito, Keiyoro, Peter Njenga, Kelbore, Sefonias Getachew, Kemmer, Laura, Kengne, Andre Pascal, Kesavachandran, Chandrasekharan Nair, Khader, Yousef Saleh, Khalil, Ibrahim A., Khan, Ejaz Ahmad, Khang, Young-Ho, Khosravi, Ardeshir, Khubchandani, Jagdish, Kieling, Christian, Kim, Daniel, Kim, Jun Y., Kim, Yun Jin, Kimokoti, Ruth W., Kinfu, Yohannes, Kisa, Adnan, Kissimova-Skarbek, Katarzyna A., Kivimaki, Mika, Knibbs, Luke D., Knudsen, Ann Kristin, Kopec, Jacek A., Kosen, Soewarta, Koul, Parvaiz A., Koyanagi, Ai, Kravchenko, Michael, Krohn, Kristopher J., Kromhout, Hans, Defo, Barthelemy Kuate, Bicer, Burcu Kucuk, Kumar, G. Anil, Kutz, Michael, Kyu, Hmwe H., Lal, Dharmesh Kumar, Lalloo, Ratilal, Lallukka, Tea, Lan, Qing, Lansingh, Van C., Larsson, Anders, Lee, Alexander, Lee, Paul H., Leigh, James, Leung, Janni, Levi, Miriam, Li, Yichong, Li, Yongmei, Liang, Xiaofeng, Liben, Misgan Legesse, Linn, Shai, Liu, Patrick, Lodha, Rakesh, Logroscino, Giancarlo, Looker, Katherine J., Lopez, Alan D., Lorkowski, Stefan, Lotufo, Paulo A., Lozano, Rafael, Lunevicius, Raimundas, Macarayan, Erlyn Rachelle King, Abd El Razek, Hassan Magdy, Abd El Razek, Mohammed Magdy, Majdan, Marek, Majdzadeh, Reza, Majeed, Azeem, Malekzadeh, Reza, Malhotra, Rajesh, Malta, Deborah Carvalho, Mamun, Abdullah A., Manguerra, Helena, Mantovani, Lorenzo G., Mapoma, Chabila C., Martin, Randall V., Martinez-Raga, Jose, Martins-Melo, Francisco Rogerlandio, Mathur, Manu Raj, Matsushita, Kunihiro, Matzopoulos, Richard, Mazidi, Mohsen, Mcalinden, Colm, Mcgrath, John J., Mehata, Suresh, Mehndiratta, Man Mohan, Meier, Toni, Melaku, Yohannes Adama, Memiah, Peter, Memish, Ziad A., Mendoza, Walter, Mengesha, Melkamu Merid, Mensah, George A., Mensink, Gert B. M., Mereta, Seid Tiku, Meretoja, Atte, Meretoja, Tuomo J., Mezgebe, Haftay Berhane, Micha, Renata, Millear, Anoushka, Miller, Ted R., Minnig, Shawn, Mirarefin, Mojde, Mirrakhimov, Erkin M., Misganaw, Awoke, Mishra, Shiva Raj, Mohammad, Karzan Abdulmuhsin, Mohammed, Kedir Endris, Mohammed, Shafiu, Ibrahim, Norlinah Mohamed, Mohan, Murali B. V., Mokdad, Ali H., Monasta, Lorenzo, Montanez Hernandez, Julio Cesar, Montico, Marcella, Moradi-Lakeh, Maziar, Moraga, Paula, Morawska, Lidia, Morrison, Shane D., Mountjoy-Venning, Cliff, Mueller, Ulrich O., Mullany, Erin C., Muller, Kate, Murthy, Gudlavalleti Venkata Satyanarayana, Musa, Kamarul Imran, Naghavi, Mohsen, Naheed, Aliya, Nangia, Vinay, Natarajan, Gopalakrishnan, Negoi, Ionut, Negoi, Ruxandra Irina, Cuong Tat, Nguyen, Grant, Nguyen, Minh, Nguyen, Quyen Le, Nguyen, Trang Huyen, Nguyen, Nichols, Emma, Ningrum, Dina Nur Anggraini, Nomura, Marika, Vuong Minh, Nong, Norheim, Ole F., Norrving, Bo, Noubiap, Jean Jacques N., Obermeyer, Carla Makhlouf, Ogbo, Felix Akpojene, Oh, Hwan, Oladimeji, Olanrewaju, Olagunju, Andrew Toyin, Olagunju, Tinuke Oluwasefunmi,				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Olivares, Pedro R., Olsen, Helen E., Olusanya, Bolajoko Olubukunola, Olusanya, Jacob Olusegun, Opio, John Nelson, Oren, Eyal, Ortiz, Alberto, Ota, Erika, Owolabi, Mayowa O., Pa, Mahesh, Pacella, Rosana E., Pana, Adrian, Panda, Basant Kumar, Panda-Jonas, Songhomitra, Pandian, Jeyaraj D., Papachristou, Christina, Park, Eun-Kee, Parry, Charles D., Patten, Scott B., Patton, George C., Pereira, David M., Perico, Norberto, Pesudovs, Konrad, Petzold, Max, Phillips, Michael Robert, Pillay, Julian David, Piradov, Michael A., Pishgar, Farhad, Plass, Dietrich, Pletcher, Martin A., Polinder, Suzanne, Popova, Svetlana, Poulton, Richie G., Pourmalek, Farshad, Prasad, Narayan, Purcell, Carrie, Qorbani, Mostafa, Radfar, Amir, Rafay, Anwar, Rahimi-Movaghar, Afarin, Rahimi-Movaghar, Vafa, Rahman, Mahfuzar, Rahman, Mohammad Hifz Ur, Rahman, Muhammad Aziz, Rai, Rajesh Kumar, Rajsic, Sasa, Ram, Usha, Rawaf, Salman, Rehm, Colin D., Rehm, Jurgen, Reiner, Robert C., Reitsma, Marissa B., Myriam Reynales-Shigematsu, Luz, Remuzzi, Giuseppe, Renzaho, Andre M. N., Resnikoff, Serge, Rezaei, Satar, Ribeiro, Antonio L., Rivera, Juan A., Roba, Kedir Teji, Rojas-Rueda, David, Roman, Yesenia, Room, Robin, Roshandel, Gholamreza, Roth, Gregory A., Rothenbacher, Dietrich, Rubagotti, Enrico, Rushton, Lesley, Sadat, Nafis, Safdarian, Mahdi, Safi, Sare, Safiri, Saeid, Sahathevan, Ramesh, Salama, Joseph, Salomon, Joshua A., Samy, Abdallah M., Sanabria, Juan Ramon, Dolores Sanchez-Nino, Maria, Sanchez-Pimienta, Tania G., Santomauro, Damian, Santos, Itamar S., Milicevic, Milena M. Santric, Sartorius, Benn, Satpathy, Maheswar, Sawhney, Monika, Saxena, Sonia, Schaeffner, Elke, Schmidt, Maria Ines, Schneider, Ione J. C., Schutte, Aletta E., Schwebel, David C., Schwendicke, Falk, Seedat, Soraya, Sepanlou, Sadaf G., Serdar, Berrin, Servan-Mori, Edson E., Shaddick, Gavin, Shaheen, Amira, Shahraz, Saeid, Shaikh, Masood Ali, Levy, Teresa Shamah, Shamsipour, Mansour, Shamsizadeh, Morteza, Islam, Sheikh Mohammed Shariful, Sharma, Jayendra, Sharma, Rajesh, She, Jun, Shen, Jiabin, Shi, Peilin, Shibuya, Kenji, Shields, Chloe, Shiferaw, Mekonnen Sisay, Shigematsu, Mika, Shin, Min-Jeong, Shiri, Rahman, Shirkoohi, Reza, Shishani, Kawkab, Shoman, Haitham, Shrime, Mark G., Sigfusdottir, Inga Dora, Santos Silva, Diego Augusto, Silva, Joao Pedro, Alves Silveira, Dayane Gabriele, Singh, Jasvinder A., Singh, Virendra, Sinha, Dhirendra Narain, Skiadaresi, Eirini, Slepak, Erica Leigh, Smith, David L., Smith, Mari, Sobaih, Badr H. A., Sobngwi, Eugene, Soneji, Samir, Sorensen, Reed J. D., Sposato, Luciano A., Sreeramareddy, Chandrashekhar T., Srinivasan, Vinay, Steel, Nicholas, Stein, Dan J., Steiner, Caitlyn, Steinke, Sabine, Stokes, Mark Andrew, Strub, Bryan, Subart, Michelle, Sufiyan, Muawiyyah Babale, Suliankatchi, Rizwan Abdulkader, Sur, Patrick J., Swaminathan, Soumya, Sykes, Bryan L., Szoeke, Cassandra E. I., Tabares-Seisdedos, Rafael, Tadakamadla,				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Santosh Kumar, Takahashi, Ken, Takala, Jukka S., Tandon, Nikhil, Tanner, Marcel, Tarekegn, Yihunie L., Tavakkoli, Mohammad, Tegegne, Teketo Kassaw, Tehrani-Banihashemi, Arash, Terkawi, Abdullah Sulieman, Tesssema, Belay, Thakur, J. S., Thamsuwan, Ornwipa, Thankappan, Kavumpurathu Raman, Theis, Andrew M., Thomas, Matthew Lloyd, Thomson, Alan J., Thrift, Amanda G., Tillmann, Taavi, Tobe-Gai, Ruoyan, Tobollik, Myriam, Tollanes, Mette C., Tonelli, Marcello, Topor-Madry, Roman, Torre, Anna, Tortajada, Miguel, Touvier, Mathilde, Tran, Bach Xuan, Truelsen, Thomas, Tuem, Kald Beshir, Tuzcu, Emin Murat, Tyrovolas, Stefanos, Ukwaja, Kingsley Nnanna, Uneke, Chigozie Jesse, Updike, Rachel, Uthman, Olalekan A., Van Boven, Job F. M., Van Donkelaar, Aaron, Varughese, Santosh, Vasankari, Tommi, Veerman, Lennert J., Venkateswaran, Vidhya, Venketasubramanian, Narayanaswamy, Violante, Francesco S., Vladimirov, Sergey K., Vlassov, Vasiliy Victorovich, Vollset, Stein Emil, Vos, Theo, Wadilo, Fiseha, Wakayo, Tolassa, Wallin, Mitchell T., Wang, Yuan-Pang, Weichenthal, Scott, Weiderpass, Elisabete, Weintraub, Robert G., Weiss, Daniel J., Werdecker, Andrea, Westerman, Ronny, Whiteford, Harvey A., Wiysonge, Charles Shey, Woldeyes, Belete Getahun, Wolfe, Charles D. A., Woodbrook, Rachel, Workicho, Abdulhalik, Hanson, Sarah Wulf, Xavier, Denis, Xu, Gelin, Yadgir, Simon, Yakob, Bereket, Yan, Lijing L., Yaseri, Mehdi, Yimam, Hassen Hamid, Yip, Paul, Yonemoto, Naohiro, Yoon, Seok-Jun, Yotebieng, Marcel, Younis, Mustafa Z., Zaidi, Zoubida, Zaki, Maysaa El Sayed, Zavala-Arciniega, Luis, Zhang, Xueying, Zimsen, Stephanie Raman M., Zipkin, Ben, Zodpey, Sanjay, Lim, Stephen S., Murray, Christopher J. L. and Collaborators, G. B. D. Risk Factors Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016 Lancet; 2017, 390 (10100): 1345-1422 Background The Global Burden of Diseases, Injuries, and Risk Factors Study 2016 (GBD 2016) provides a comprehensive assessment of risk factor exposure and attributable burden of disease. By providing estimates over a long time series, this study can monitor risk exposure trends critical to health surveillance and inform policy debates on the importance of addressing risks in context. Methods We used the comparative risk assessment framework developed for previous iterations of				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	GBD to estimate levels and trends in exposure, attributable deaths, and attributable disability-adjusted life-years (DALYs), by age group, sex, year, and location for 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks from 1990 to 2016. This study included 481 risk-outcome pairs that met the GBD study criteria for convincing or probable evidence of causation. We extracted relative risk (RR) and exposure estimates from 22 717 randomised controlled trials, cohorts, pooled cohorts, household surveys, census data, satellite data, and other sources, according to the GBD 2016 source counting methods. Using the counterfactual scenario of theoretical minimum risk exposure level (TMREL), we estimated the portion of deaths and DALYs that could be attributed to a given risk. Finally, we explored four drivers of trends in attributable burden: population growth, population ageing, trends in risk exposure, and all other factors combined. Findings Since 1990, exposure increased significantly for 30 risks, did not change significantly for four risks, and decreased significantly for 31 risks. Among risks that are leading causes of burden of disease, child growth failure and household air pollution showed the most significant declines, while metabolic risks, such as body-mass index and high fasting plasma glucose, showed significant increases. In 2016, at Level 3 of the hierarchy, the three leading risk factors in terms of attributable DALYs at the global level for men were smoking (124.1 million DALYs [95% UI 111.2 million to 137.0 million]), high systolic blood pressure (122.2 million DALYs [110.3 million to 133.3 million], and low birthweight and short gestation (83.0 million DALYs [78.3 million to 87.7 million]), and for women, were high systolic blood pressure (89.9 million DALYs [80.9 million to 98.2 million]), high body-mass index (64.8 million DALYs [44.4 million to 87.6 million]), and high fasting plasma glucose (63.8 million DALYs [53.2 million to 76.3 million]). In 2016 in 113 countries, the leading risk factor in terms of attributable DALYs was a metabolic risk factor. Smoking remained among the leading five risk factors for DALYs for 109 countries, while low birthweight and short gestation was the leading risk factor for DALYs in 38 countries, particularly in sub-Saharan Africa and South Asia. In terms of important drivers of change in trends of burden attributable to risk factors, between 2006 and 2016 exposure to risks explains an 9.3% (6.9-11.6) decline in deaths and a 10.8% (8.3-13.1) decrease in DALYs at the global level, while population ageing accounts for 14.9% (12.7-17.5) of deaths and 6.2% (3.9-8.7) of DALYs, and population growth for 12.4% (10.1-14.9) of deaths and 12.4% (10.1-14.9) of DALYs. The largest contribution of trends in risk exposure to disease burden is seen between ages 1 year and 4 years, where a decline of 27.3% (24.9-29.7) of the change in DALYs between 2006 and 2016 can be attributed to				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	declines in exposure to risks. Interpretation Increasingly detailed understanding of the trends in risk exposure and the RRs for each risk-outcome pair provide insights into both the magnitude of health loss attributable to risks and how modification of risk exposure has contributed to health trends. Metabolic risks warrant particular policy attention, due to their large contribution to global disease burden, increasing trends, and variable patterns across countries at the same level of development. GBD 2016 findings show that, while it has huge potential to improve health, risk modification has played a relatively small part in the past decade. Copyright (C) The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY 4.0 license. DOI: 10.1016/S0140-6736(17)32366-8				
173.	Ganapule, A., Jain, P., Abubacker, F. N., Korula, A., Abraham, A., Mammen, J., George, B., Mathews, V., Srivastava, A. and Viswabandya, A. Surgical procedures in patients with Glanzmann's thrombasthenia: case series and literature review Blood Coagul Fibrinolysis; 2017, 28 (2): 171-175 **Address:** aDepartment of Haematology bDepartment of Immunohaematology and Transfusion Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Glanzmann's thrombasthenia is a rare platelet function disorder with an autosomal recessive pattern of inheritance. Achieving haemostasis in such patients who undergo surgical procedures always poses a significant challenge. Herein we report six cases of Glanzmann's thrombasthenia, who underwent nine surgeries under the cover of platelet-rich concentrates with or without recombinant activated factor VII. Of these, five were major surgeries such as thyroidectomy, laparotomy, Hartmann's procedure, reversal of Hartmann's procedure and a complete dental extraction. All five procedures were successfully done without any major bleeding. The major cost incurred in these procedures is due to the large number of blood products used and recombinant activated factor VII if used.	**INT**	**JAN TO JUN**	**HAEMATOLOGY, IMMUNOHAEMATOLOGY AND TRANSFUSION MEDICINE**	**PMID:**27273143 **Impact Factor:**1.367 **H-Index:**64
174.	Ganapule, A., Nemani, S., Korula, A., Lakshmi, K. M., Abraham, A., Srivastava, A., Balasubramanian, P., George, B. and Mathews, V. Allogeneic Stem Cell Transplant for Acute Myeloid Leukemia: Evolution of an Effective Strategy in India J Glob Oncol; 2017, 3 (6): 773-781	**INT**	**JUL TO DEC**	**HAEMATOLOGY**	**PMID:**29244983 **Impact Factor:** NA **H-Index:**NA

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: All authors: **Christian Medical College, Vellore,** India. Purpose There are limited data from developing countries on the role and cost-effectiveness of allogeneic stem cell transplantation (allo-SCT) for patients with acute myeloid leukemia (AML). Patients and Methods We undertook a retrospective descriptive study of all patients with AML who underwent allo-SCT from 1994 to 2013 at our center to evaluate the clinical outcomes and cost-effectiveness of this therapeutic modality. Results Two hundred fifty-four consecutive patients, median age 34 years, who underwent allo-SCT at our center were included in this study. There were 161 males (63.4%). The 5-year overall survival (OS) and event-free survival for the entire cohort was 40.1 +/- 3.5% and 38.7 +/- 3.4%, respectively. The 5-year OS for patients in first (CR1), second, and third complete remission and with disease/refractory AML was 53.1 +/- 5.2%, 48.2 +/- 8.3%, 31.2 +/- 17.8%, and 16.0 +/- 4.4%, respectively (P < .001). From 2007, reduced intensity conditioning (RIC) with fludarabine and melphalan (Flu/Mel) was used in a majority of patients in CR1 (n = 67). Clinical outcomes were compared with historical conventional myeloablative conditioning regimens (n = 38). Use of Flu/Mel was associated with lower treatment-related mortality at 1 year, higher incidence of chronic graft-versus-host-disease, and comparable relapse rates. The 5-year OS and event-free survival for Flu/Mel and myeloablative conditioning group was 67.2 +/- 6.6% versus 38.1 +/- 8.1% (P = .003) and 63.8 +/- 6.4% versus 32.3 +/- 7.9% (P = .002), respectively. Preliminary cost analysis suggests that in our medical cost payment system, RIC allo-SCT in CR1 was likely the most cost-effective strategy in the management of AML. Conclusion In a resource-constrained environment, Flu/Mel RIC allo-SCT for AML CR1 is likely the most efficacious and cost-effective approach in a subset of newly diagnosed young adult patients.				
175.	Gandham, E. J., Sundaresan, R., Thomas, R. and Chacko, A. G. A novel nasoseptal flap harvesting technique in revision expanded endoscopic transsphenoidal approaches Neurol India; 2017, 65 (1): 129-133 **Address:** Department of Neurosurgery, **Christian Medical College, Vellore,** Tamil	**NAT**	**JAN TO JUN**	**NEUROSURGERY, OTOLARYNGOLOGY**	**PMID:**28084257 **Impact Factor:** 1.758 **H-Index:**39

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Nadu, India. Department of Otolaryngology, **Christian Medical College, Vellore,** Tamil Nadu, India. **OBJECTIVES:** To describe the technique of harvesting the nasoseptal flap (NSF) in revision-expanded endoscopic approaches (EEA). STUDY DESIGN: We retrospectively analyzed four cases of endoscopic skull base reconstruction (ESBR) following revision EEA done for pituitary adenoma recurrence. The presence of an intact mucoperiosteum between the nasal septum and the roof of the choana as judged on a preoperative endoscopic and radiological assessment was considered to be sufficient for the presence of a viable pedicle. By strategic placement of the incisions, the entire bilateral posterior nasal septal mucoperiosteum was raised in the NSF containing the remnant vascular pedicle. ESBR was performed with multilayer grafting of the dural defect, and the NSF was placed onto the bony margins of the defect. **RESULTS:** All patients had successful skull base reconstruction with the NSF raised by this technique as none of them developed postoperative cerebrospinal fluid leak. **CONCLUSION:**Though the number of patients in this study is small, we would like to present the concept of harvesting the NSF in revision surgery, wherein neither measuring the surface area of the pedicle nor the acoustic Doppler assessment of the pedicle is required.				
176.	Gandham, E. J., Vasudevan, P., Moorthy, R. K., Narasimhan, K., Murthy, M., Rebekah, G. and Rajshekhar, V. Cortical Aquaporin-4 in relation to brain oedema and neurological function of cortical cryo-injured mice J Clin Neurosci; 2017, **Address:** Department of Neurological Sciences, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Electronic **Address:** gandham.edmond@gmail.com. Department of Neurological Sciences, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Neurological Sciences, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Electronic **Address:** ranjith@cmcvellore.ac.in. Department of Biostatistics, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Neurological Sciences, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Electronic **Address:** rajshekhar@cmcvellore.ac.in	**INT**	**JAN TO JUN**	**NEUROLOGICAL SCIENCES, NEUROSURGERY UNIT 1, 2**	**PMID:**28645746 **Impact Factor:** 1.557 **H-Index:**62

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	To estimate the spatial and temporal expression of Aquaporin-4 (AQP-4) in a murine model of automated cerebral cryoinjury and correlate AQP-4 expression with development of brain oedema and neurological function. AQP-4 levels were determined quantitatively by Western blots at site of injury and at sites adjacent to and distant from injury in brains of cryoinjured (experimental) (n=18), sham injured (n=18) & normal mice at 24, 48, 72h post injury. AQP-4 expression was correlated with percentage water content of brain, Neurological Severity Score (NSS) and rotarod scores. We found a 1.4-fold increase in expression of AQP-4 at the site of injury and at sites distant from injury at 24h when compared to normal mice (p=0.05). The increase in expression of AQP-4 24h post injury was significantly higher in experimental group at the site of injury and at the site adjacent to the injury in the ipsilateral hemisphere when compared to the sham injured mice (p=0.05). At 24h post injury the median NSS score in the experimental group was 9 (interquartile range 7.25-10) and that in the sham group was 0.5 (interquartile range 0.0-1.0) (p<0.001). At 48 and 72h, AQP-4 expression remained elevated in the experimental group when compared to normal brain, but the levels were not significantly different from that in sham group. AQP-4 expression was significantly elevated in the ipsilateral hemisphere in the first 24h following cerebral cortical injury in mice and this could be correlated with worsening of neurological function. Over the next 48h, there was a trend towards decrease in AQP-4 expression that was associated with partial recovery of neurological function.				
177.	Garge, S., Keshava, S. N. and Moses, V. Cannula-Assisted, Transabdominal Ultrasound-Guided Inferior Vena Cava Recanalization in Inferior Vena Cava Occlusion Curr Probl Diagn Radiol; 2017, 46 (3): 196-199 **Address:** Department of Radiology, **Christian Medical College, Vellore,** India. Electronic **Address:** drshaileshgarge@gmail.com Department of Radiology, **Christian Medical College, Vellore,** India. We describe a novel technique for facilitating recanalization of intrahepatic inferior vena cava (IVC) via the transjugular approach in patients with short segmental hepatic IVC occlusion, where a transjugular liver biopsy cannula provides additional support to the catheter-wire combination and trans-abdominal ultrasound helps in	**INT**	**JAN TO JUN**	**RADIOLOGY**	**PMID:**27667701 **Impact Factor:**0.880 **H-Index:**25

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	positioning the tip of the cannula at the stump of suprahepatic IVC.				
178.	Garge, S., Keshava, S. N., Moses, V., Chiramel, G. K., Ahmed, M., Mammen, S. and Madhuri, V. Radiofrequency ablation of osteoid osteoma in common and technically challenging locations in pediatric population Indian J Radiol Imaging; 2017, 27 (1): 88-91 **Address:** Department of Radiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Paediatric Orthopedics, **Christian Medical College, Vellore,** Tamil Nadu, India. **CONTEXT:** Percutaneous radiofrequency ablation (RFA) of osteoid osteoma has a high technical and clinical success rate. However, there is limited data on its use in the pediatric population, especially in technically challenging locations. **OBJECTIVE:** To assess the safety and efficacy of computed tomography (CT)-guided percutaneous RFA of osteoid osteoma in pediatric population. PATIENTS AND **METHODS:** From June 2009 to May 2014, 30 patients with osteoid osteoma were treated with CT-guided RFA in common (25 cases) and technically challenging (five cases: four near articular surface and one in sacrum) locations. Therapy was performed under general anesthesia with a three-array expandable RF probe for 6 min at 90 degrees C and power of 60-100 W. The patients were discharged next day under instruction. The treatment success was evaluated in terms of pain relief before and after (1 day, 1 month, and 6 months) treatment. **RESULTS:** Technical success was achieved in all patients (100%). Primary clinical success was 96.66% (29 of total 30 patients), despite the pediatric population and atypical location. One patient had persistent pain after 1 month and was treated successfully with a second procedure (secondary success rate was 100%). One patient had immediate complication of weakness of right hand and fingers extension. No delayed complications were observed. **CONCLUSIONS:** CT-guided RFA is relatively safe and highly effective for treatment of osteoid osteoma in pediatric population, even in technically difficult locations.	**NAT**	**JAN TO JUN**	**PEDIATRIC ORTHOPAEDICS, RADIOLOGY**	**PMID:**28515594 **Impact Factor:** NA **H-Index:**15
179.	Garge, S., Keshava, S. N., Moses, V., Koshy, G., Ahmed, M., Mammen, S. and Madhuri, V. Radiofrequency Ablation of Osteoid Osteoma in Common and Technically Challenging Locations in Pediatric Population	**NAT**	**JUL TO DEC**	**PEDIATRIC ORTHOPAEDICS, RADIOLOGY**	**PMID:**29200678 **PMCID:**5686971 **Impact Factor:**1.070

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Indian J Med Paediatr Oncol; 2017, 38 (3): 302-305 **Address:** Department of Radiology and Paediatric Orthopedics, **Christian Medical College, Vellore,** Tamil Nadu, India. Context: Percutaneous radiofrequency ablation (RFA) of osteoid osteoma has a high technical and clinical success rate. However, there is limited data on its use in the pediatric population, especially in technically challenging locations. Objective: The objective of this study was to assess the safety and efficacy of CT-guided percutaneous RFA of osteoid osteoma in pediatric population. Subjects and Methods: From June 2009 to May 2014, thirty patients with osteoid osteoma were treated with CT-guided RFA in common (25 cases) and technically challenging (five cases: four near articular surface and one in sacrum) locations. Therapy was performed under general anesthesia with a three-array expandable RF probe for 6 min at 90 degrees C and power of 60-100 W. The patients were discharged next day under instruction. The treatment success was evaluated in terms of pain relief before and after (1 day, 1 month, and 6 months) treatment. Results: Technical success was achieved in all patients (100%). Primary clinical success was 96.66% (29 of total 30 patients) despite the pediatric population and atypical location. One patient had persistent pain after 1 month duration and were treated successfully with a second procedure (secondary success rate was 100%). One patient had immediate complication of weakness of right hand and fingers extension. No delayed complications were observed. Conclusions: CT-guided RFA is relatively safe and highly effective for treatment of osteoid osteoma in pediatric population, even in technically difficult locations. Advance in Knowledge: Our study showed that if technical success is 100% and if strict desired temperature (90 degrees C) can be maintained for desired time (6 min) using controlled power (wattage) delivery (60-100 W), then high clinical success can be achieved even in pediatric population similar to adult population.				**H-Index:**12
180.	Garge, S., Mani, S., Inbaraj, A., Rajshekhar, V. and Mohapatra, P. Cavernous sinus melanoma: A rare tumor Indian J Radiol Imaging; 2017, 27 (1): 43-45 **Address:** Department of Radiology and Neurosurgery, **Christian Medical College,**	**NAT**	**JAN TO JUN**	**RADIOLOGY, NEUROSURGERY**	**PMID:**28515583 **Impact Factor:** NA **H-Index:**15

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Vellore, Tamil Nadu, India. Primay melanoma of the cavernous sinus is very rare with only few cases reported in the literature. We present the cross-sectional imaging findings of this rare tumor. The differential diagnosis for cavernous sinus mass lesion is wide as it contains vital neurovascular structures that may be affected by vascular, neoplastic, infective, and infiltrative lesions arising in the cavernous sinus proper or via extension from adjacent intra and/or extracranial regions. Radiologic imaging can narrow the differential diagnosis, however, imaging cannot definitely reach single diagnosis if they present in atypical form with hemorrage and cystic degeneration. This case report illustrates that primary cavernous sinus melanoma may present as a atypical tumor with diagnostic dilemma.				
181.	Gathani, T., Barnes, I., Ali, R., Arumugham, R., Chacko, R., Digumarti, R., Jivarajani, P., Kannan, R., Loknatha, D., Malhotra, H. and Mathew, B. S. Lifelong vegetarianism and breast cancer risk: a large multicentre case control study in India Bmc Womens Health; 2017, 17 (1): 6 **Address:** Cancer Epidemiology Unit, Nuffield Department of Population Health, University of Oxford, Richard Doll Building, Roosevelt Drive, Oxford, OX3 7LF, UK. toral.gathani@ceu.ox.ac.uk. Oxford University Hospitals NHS Foundation Trust, Oxford, UK. toral.gathani@ceu.ox.ac.uk. Cancer Epidemiology Unit, Nuffield Department of Population Health, University of Oxford, Richard Doll Building, Roosevelt Drive, Oxford, OX3 7LF, UK. G Kuppuswamy Naidu Memorial Hospital, Coimbatore, India. **Christian Medical College, Vellore,** India. Nizams Institute of Medical Sciences, Hyderabad, India. Gujarat Cancer Research Institute, Ahmedabad, India. Cachar Cancer Hospital and Research Centre, Silchar, India. Kidwai Memorial Institute of Oncology, Bangalore, India. RK Birla Cancer Centre, SMS Medical College, Jaipur, India. Regional Cancer Centre, Trivandrum, India. **BACKGROUND:** The lower incidence of breast cancer in Asian populations where the intake of animal products is lower than that of Western populations has led some to suggest that a vegetarian diet might reduce breast cancer risk. **METHODS:** Between 2011 and 2014 we conducted a multicentre hospital based case-control study in eight cancer centres in India. Eligible cases were women aged	**INT**	**JAN TO JUN**	**PULMONARY MEDICINE**	**PMID:**28100209 **Impact Factor:**1.572 **H-Index:**34

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	30-70 years, with newly diagnosed invasive breast cancer (ICD10 C50). Controls were frequency matched to the cases by age and region of residence and chosen from the accompanying attendants of the patients with cancer or those patients in the general hospital without cancer. Information about dietary, lifestyle, reproductive and socio-demographic factors were collected using an interviewer administered structured questionnaire. Multivariate logistic regression models were used to estimate the odds ratio (OR) and 95% confidence intervals for the risk of breast cancer in relation to lifelong vegetarianism, adjusting for known risk factors for the disease. **RESULTS:** The study included 2101 cases and 2255 controls. The mean age at recruitment was similar in cases (49.7 years (SE 9.7)) and controls (49.8 years (SE 9.1)). About a quarter of the population were lifelong vegetarians and the rates varied significantly by region. On multivariate analysis, with adjustment for known risk factors for the disease, the risk of breast cancer was not decreased in lifelong vegetarians (OR 1.09 (95% CI 0.93-1.29)). **CONCLUSIONS:** Lifelong exposure to a vegetarian diet appears to have little, if any effect on the risk of breast cancer.				
182.	George, B., Pn, N., Devasia, A. J., Kulkarni, U., Korula, A., Lakshmi, K. M., Abraham, A., Srivastava, A. and Mathews, V. Post-Transplant Cyclophosphamide as Sole Graft-versus-Host Disease Prophylaxis Is Feasible in Patients Undergoing Peripheral Blood Stem Cell Transplantation for Severe Aplastic Anemia Using Matched Sibling Donors Biol Blood Marrow Transplant; 2017, **Address:** Department of Haematology, **Christian Medical College, Vellore,** India. Electronic address: biju@cmcvellore.ac.in. Department of Haematology, **Christian Medical College, Vellore,** India. High-dose cyclophosphamide (PTCY) after allogeneic hematopoietic cell transplantation (HSCT) has been shown to be effective in preventing graft-versus-host disease (GVHD) after HLA-matched bone marrow transplantation. We performed a phase II study of PTCY given at 50 mg/kg i.v. on days 3 and 4 as the sole GVHD prophylaxis after HSCT for severe aplastic anemia (SAA) in patients receiving granulocyte colony-stimulating factor-mobilized peripheral blood stem cell (PBSC) grafts from HLA-matched related donors after conditioning with fludarabine, CY, and single-dose total body irradiation. Thirty patients with a median age of 29 years (range, 16 to 49) were enrolled in this study. Engraftment was seen in 27 patients (90%) at a median of 16 days (range, 12 to 21) post-HSCT. None of the patients developed veno-occlusive disease of the liver or	**INT**	**JUL TO DEC**	**HAEMATOLOGY**	**PMID:**29100905 **Impact Factor:**4.704 **H-Index:**99

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	hemorrhagic cystitis. Grades II to IV acute GVHD was seen in 22% of patients with grades III to IV GVHD in 11.1%. The 2-year cumulative incidence of chronic GVHD was 22.7%. Fourteen patients (46.6%) did not require any further immunosuppression after receiving PTCY. Comparing with 2 historical cohorts of 30 patients each who received cyclosporine and methotrexate (MTX; at 15 mg/m(2) [MTX15] and 10 mg/m(2) [MTX10]), the incidence of grades II to IV acute GVHD was lower, albeit not significantly, with the use of PTCY (PTCY, 22.2%, vs MTX15, 37.1%, vs MTX10, 53.8%; P = .056), whereas rates of chronic GVHD were significantly reduced (PTCY, 22.7%, vs MTX15, 63.6%, vs MTX10, 76.2%; P = .013). Viral infections including cytomegalovirus were significantly higher with the use of PTCY (60%) compared with cyclosporine and MTX (MTX15, 23.3%, vs MTX10, 33.3%; P = .008). Overall survival was similar between the 3 groups. We conclude that PTCY as the sole GVHD prophylaxis is associated with low rates of acute and chronic GVHD in patients undergoing PBSC transplant for SAA using HLA-matched donors. This trial is registered at CTRI/2010/091/001480.				
183.	George, D. E., Dholakia, S. and Tharyan, P. Assessing decisional capacity for research participation in psychiatric patients and their relatives Indian J Med Ethics; 2017, - (-): 1-9 **Address:** Assistant Professor of Psychiatry, Department of Psychiatry, Psychiatry Unit II, **Christian Medical College, Vellore,** Tamil Nadu, India., donae@cmcvellore.ac.in. Associate Professor of Psychiatry, Department of Psychiatry, Psychiatry Unit II, **Christian Medical College, Vellore,** Tamil Nadu, India., dholakiasaumil@cmcvellore.ac.in. A cross-sectional study among adult inpatients with non-organic psychiatric disorders, and among their key relatives, assessed their comprehension and recall of key information in consent forms. It also assessed their capacity to consent to participate in two hypothetical randomised controlled trials (RCTs) with different potential risks and burdens, using structured questionnaires and recorded interviews. Of the 24 participants (12 patient-key relative dyads), seven patients (58%) and three key relatives (25%) were clinically judged to lack the capacity to consent. Of the remaining 14 participants s, less than half the patients (2/5; 40%) or relatives (3/9; 33%) accurately recalled 50% of the key information on both trials. Among the eight participants (3 patients, 5 relatives) independently	**NAT**	**JAN TO JUN**	**PSYCHIATRY**	**Impact Factor:**0.49

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	assessed on the MacArthur Competence Assessment Tool for Clinical Research, the proportions judged competent for each trial varied with the criteria for defining competence. No one fulfilled the stringent competence criteria for both trials. Routine assessments of the capacity of psychiatric research participants, and of relatives providing proxy consent, appear to be warranted. However, neither suboptimal understanding of consent forms, nor incompetence determined by the use of formal assessment tools, necessarily denote an incapacity to consent to research if detailed clinical assessments indicate otherwise. Research into incorporating participants' health literacy and clinical status in formal assessments may help determine the optimal standards for defining competence. **PMID:**28918381				
184.	George, D. E., Dholakia, S. and Tharyan, P. Participation in randomised controlled trials: perspectives of psychiatric patients and key relatives Indian J Med Ethics; 2017, - (-): 1-13 **Address:** Assistant Professor of Psychiatry, Department of Psychiatry, Psychiatry Unit II, **Christian Medical College, Vellore,** Tamil Nadu, India., donae@cmcvellore.ac.in. Associate Professor of Psychiatry, Department of Psychiatry, Psychiatry Unit II, **Christian Medical College, Vellore,** Tamil Nadu, India., dholakiasaumil@cmcvellore.ac.in. Professor of Psychiatry, Department of Psychiatry, Psychiatry Unit II, **Christian Medical College, Vellore,** Tamil Nadu 632 002, India., prathap@cmcvellore.ac.in. This study assessed the perspectives of adults who had acute nonorganic psychiatric disorders and were admitted in a private, not for- profit medical college hospital, and also of their key relatives, on randomised controlled trials (RCTs). Structured questionnaires and audio-recorded interviews were used for the purpose. We explored their willingness and motivation to participate in two hypothetical RCTs with different risks and burdens. The transcripts of the interviews were analysed using the principles of grounded theory and framework analysis. Of the 24 consenting participants (12 patient and key-relative dyads), the 20 who completed the interviews had largely positive attitudes towards research and RCTs. However, 50% of those interviewed declined to participate in either of the hypothetical RCTs. The refusal to participate seemed to be influenced by a lack	**NAT**	**JUL TO DEC**	**PSYCHIATRY UNIT II**	**PMID:**28889088 **Impact Factor:**0.490 **H-Index:**12

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	of education; forgetfulness, which impeded the process of making informed decisions; unfavourable benefit-risk-burden ratios; practical difficulties; dependence on treating doctors and relatives for decision-making; and the wish to exercise one's choice regarding treatment options. The factors that motivated the patients and relatives were trust in doctors and organisations, altruism, expectation of personal benefits and favourable risk-benefit ratios. These observations indicate that while the respondents in this study valued research, they were discerning about whether or not to participate in the trials; their decision-making was influenced by individualised assessments of risks and burdens and pragmatic considerations, rather than only by the benefits they would obtain.				
185.	George, D. E., Dholakia, S. and Tharyan, P. Assessing decisional capacity for research participation in psychiatric patients and their relatives Indian J Med Ethics; 2017, - (-): 1-9 **Address:** Assistant Professor of Psychiatry, Department of Psychiatry, Psychiatry Unit II, **Christian Medical College, Vellore,** Tamil Nadu, India., donae@cmcvellore.ac.in. Associate Professor of Psychiatry, Department of Psychiatry, Psychiatry Unit II, **Christian Medical College, Vellore,** Tamil Nadu, India., dholakiasaumil@cmcvellore.ac.in. A cross-sectional study among adult inpatients with non-organic psychiatric disorders, and among their key relatives, assessed their comprehension and recall of key information in consent forms. It also assessed their capacity to consent to participate in two hypothetical randomised controlled trials (RCTs) with different potential risks and burdens, using structured questionnaires and recorded interviews. Of the 24 participants (12 patient-key relative dyads), seven patients (58%) and three key relatives (25%) were clinically judged to lack the capacity to consent. Of the remaining 14 participants s, less than half the patients (2/5; 40%) or relatives (3/9; 33%) accurately recalled 50% of the key information on both trials. Among the eight participants (3 patients, 5 relatives) independently assessed on the MacArthur Competence Assessment Tool for Clinical Research, the proportions judged competent for each trial varied with the criteria for defining competence. No one fulfilled the stringent competence criteria for both trials.	**NAT**	**JUL TO DEC**	**PSYCHIATRY UNIT II**	**PMID:**28918381 **Impact Factor:**0.490 **H-Index:**12

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Routine assessments of the capacity of psychiatric research participants, and of relatives providing proxy consent, appear to be warranted. However, neither suboptimal understanding of consent forms, nor incompetence determined by the use of formal assessment tools, necessarily denote an incapacity to consent to research if detailed clinical assessments indicate otherwise. Research into incorporating participants' health literacy and clinical status in formal assessments may help determine the optimal standards for defining competence.				
186.	George, G., Awhad, S. A., Thampi, S. M. and Philip, M. A. Isolated lower lip edema: A rare complication of prone positioning J Anaesthesiol Clin Pharmacol; 2017, 33 (2): 274-275 **Address:** Department of Anaesthesia, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Cardiothoracic Surgery, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India.	**INT**	**JUL TO DEC**	**ANAESTHESIA, CARDIOTHORACIC SURGERY**	**PMID:**28781469 **PMCID:**5520616 **Impact Factor:**0.910 **H-Index:**19
187.	George, L. R., Panchanathan, I., Cherian, N. E. and Mariappan, R. Pierre Robin Sequence With Full Stomach for Emergency Ventriculoperitoneal Shunt: Anesthetic Challenges J Neurosurg Anesthesiol; 2017, 29 (3): 358-359 **Address:** Department of Anesthesia, **Christian Medical College, Vellore,** Tamil Nadu India.	**INT**	**JUL TO DEC**	**ANAESTHESIA**	**PMID:**26859548 **Impact Factor:** 3.925 **H-Index:**52
188.	George, L. R., Sahajanandan, R. and Ninan, S. Low-dose Succinylcholine to Facilitate Laryngeal Mask Airway Insertion: A Comparison of Two Doses Anesth Essays Res; 2017, 11 (4): 1051-1056 **Address:** Department of Anaesthesiology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Background and Aims: Around the world, the use of the laryngeal mask airway	**INT**	**JUL TO DEC**	**ANAESTHESIA**	**PMID:**29284874 **PMCID:**5735449 **Impact Factor:**NA **H-Index:**NA

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	(LMA) is becoming more common for different surgeries accounting for it being the dominant choice of airway in numerous surgeries. Although propofol is known to blunt the laryngeal reflexes often patient movement, coughing, and gagging occur on insertion. This study aims to identify the optimum dose of succinylcholine required to facilitate LMA insertion comparing placebo, 0.1 mg/kg and 0.25 mg/kg of succinylcholine. Further objectives were to compare (a) the overall insertion conditions of the LMA, (b) the number of insertion attempts, (c) the amount of propofol consumption, and (d) the hemodynamics in the three groups. Setting and Design: This is a prospective, double-blinded, randomized control trial of 283 patients randomized into three groups-placebo, 0.1 mg/kg and 0.25 mg/kg of succinylcholine. It was done in the day case theatres of a tertiary hospital in Southern India. Subjects and Methods: Patients were induced with 2 mg/kg of propofol, after 2 mug/kg of fentanyl. The study drug was given after loss of consciousness. After 60 s, a classic LMA was inserted by the standard method by a single investigator. Jaw relaxation, coughing, gagging, movement, laryngospasm, ease of insertion, number of attempts, propofol usage, and hemodynamics were assessed. Statistical Analysis: Statistical methods used were analysis of variance with Bonferroni's t-test, Chi-square test, and Fisher's test. $P < 0.05$ was considered statistically significant. Results: Jaw relaxation was significantly better in the 0.25 mg/kg succinylcholine group. There was no significant difference in coughing and gagging in the groups, but patient movement was more in the placebo group. Two patients in the placebo group experienced partial laryngospasm. Overall insertion conditions were significantly better in the 0.25 mg/kg group compared to the other two groups. Propofol consumption was significantly more in the placebo group. Conclusions: The study concludes that 0.25 mg/kg succinylcholine facilitates insertion of the LMA.				
189.	George, R. and Narayanan, K. Beyond Competence: Perspectives From Two Centuries J Palliat Care; 2017, 32 (3-4): 144-147 **Address:** 1 Palliative Care Unit, **Christian Medical College, Vellore,** Tamil Nadu, India. 2 MaxCure Hospitals, Hyderabad, Telangana, India. A sense of failure and guilt can often be associated with the death of a patient. Using the Serenity Prayer as a framework, we present autobiographical narratives	**INT**	**JUL TO DEC**	**PALLIATIVE CARE UNIT**	**PMID:**29249198 **Impact Factor:** 0.618 **H-Index:**45

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	describing encounters that happened in Vellore, India over a hundred years apart. Powerlessness in the face of death, we suggest, is not the same as ignorance or incompetence. It could well be the breakthrough to a deeper wisdom and lasting empowerment.				
190.	George, R., Prasoona, T. S., Kandasamy, R., Cherian, R., Celine, T., Jeba, J., Murali, S. and Mathew, D. Improving malodour management in advanced cancer: a 10-year retrospective study of topical, oral and maintenance metronidazole BMJ Support Palliat Care; 2017, **Address:** Palliative Care Unit, **Christian Medical College, Vellore,** Tamil Nadu, India. Nuclear Medicine Department, **Christian Medical College, Vellore,** Tamil Nadu, India. **OBJECTIVES:** To explore the relative effectiveness of topical or oral metronidazole used for malodour in necrotic cancers and to propose a protocol for metronidazole usage in managing malodour. **METHODS:** A retrospective case note review of the management of malodour over 10 years comparing outcomes with topical, intermittent and maintenance oral metronidazole. **RESULTS:** Among 179 patients treated for malodour, the commonest primaries were cervical (45%), and head and neck cancers (40%). Outcomes were poor during the period when only topical or intermittent oral metronidazole was used. Topical use gradually decreased (97% vs 55%) and the proportion of patients receiving maintenance oral metronidazole increased (0% in 2003-2004 vs 93% in 2011). Concurrently, there was reduction in documented malodour (12.5% of visits per patient in 2003-2004 vs 1.5% in 2011, $p<0.01$). **CONCLUSIONS:** Our data support formulary guidelines recommending maintenance metronidazole for recurrent malodour. Dimethyl trisulfide, a product of anaerobic necrosis causes malodour and can attract maggot-producing flies to decaying tissues. Therefore, to reduce anaerobic malodour in vulnerable settings, we propose a ladder for metronidazole titration. High-risk patients should start with 400 mg thrice daily x7 days and continue 200 mg once daily. The SNIFFF severity (Smell-Nil, Faint, Foul or Forbidding) can guide follow-up dosage: 200 mg once daily to continue for nil or faint smell; breakthrough courses of 400 mg thrice daily	**INT**	**JAN TO JUN**	**PALLIATIVE CARE UNIT, NUCLEAR MEDICINE**	**PMID:**28174164 **Impact Factor:**NA **H-Index:**15

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	x1 week for foul smell and 2 weeks for forbidding smell, followed by 200 mg once daily.The effectiveness and limitations of maintenance metronidazole and the SNIFFF ladder should be prospectively evaluated.				
191.	George, S., Geldhof, P., Albonico, M., Ame, S. M., Bethony, J. M., Engels, D., Mekonnen, Z., Montresor, A., Hem, S., Tchuem-Tchuente, L. A., Huong, N. T., Kang, G., Vercruysse, J. and Levecke, B. The molecular speciation of soil-transmitted helminth eggs collected from school children across six endemic countries Trans R Soc Trop Med Hyg; 2017, **Address:** Department of Virology, Parasitology and Immunology, Ghent University, Faculty of Veterinary Medicine, Salisburylaan 133, B-9820 Merelbeke, Belgium. Department of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India. Center for Tropical Diseases, Sacro Cuore Hospital - WHO Collaborating Centre on strongyloidiasis and other intestinal parasitic infections, Negrar, Italy. University of Torino, Italy. Public Health Laboratory, Ivo de Carneri, Chake-chake, Zanzibar, Tanzania. Microbiology, Immunology and Tropical Medicine, George Washington University Medical Center, Washington, USA. Department of Control of Neglected Tropical Diseases, World Health Organization, Geneva, Switzerland. Department of Medical Laboratory Sciences and Pathology, Jimma University, Jimma, Ethiopia. Clinical Laboratory, Pasteur Institute in Cambodia, Phnom Penh, Cambodia. Centre for Schistosomiasis and Parasitology, Faculty of Sciences, University of Yaounde I, Yaounde, Cameroon. Department of Parasitology, National Institute of Malariology, Parasitology and Entomology, Ha Noi, Vietnam. Department of Virology, Parasitology and Immunology, Ghent University, Faculty of Veterinary Medicine, Salisburylaan 133, B-9820 Merelbeke, Belgium bruno.levecke@ugent.be **BACKGROUND:** The diagnosis of soil-transmitted helminths (STHs; Ascaris, Trichuris and hookworms) is traditionally based on the demonstration of eggs in stool using microscopic techniques. While molecular techniques are more appropriate to speciate STH species they are seldom applied. In this study we speciated STH eggs from stool using molecular techniques to gain insights into the distribution of both human and animal STH species in the human host. **METHODS:** We speciated 207 STH egg isolates from stool collected during the baseline survey of six drug efficacy trials conducted in Brazil, Cambodia, Cameroon, Ethiopia,	**INT**	**JAN TO JUN**	**GASTROINTESTINAL SCIENCES**	**PMID:**28100811 **Impact Factor:** 2.279 **H-Index:**89

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Tanzania and Vietnam applying a PCR - restriction fragment length polymorphisms based approach. **RESULTS:** DNA of Ascaris was detected in 71 (34.3%) samples, of which all were identified as the human roundworm Ascaris lumbricoides. In 87 (42.0%) samples, DNA of Trichuris spp. was found and further speciation demonstrated the presence of the human Trichuris trichiura (100%) and the canine Trichuris vulpis (n=7; 8.0%; in Cameroon only). Hookworms were identified in 104 (50.2%) samples, with Necator americanus (n=73; 70.2%) being the predominant species followed by Ancylostoma duodenale (n=40; 38.5%). **CONCLUSIONS:** Our study indicates that STH infections in humans are predominantly caused by human STH species. They also suggest that zoonotic transmission occurs on a local scale.				
192.	George, T., Venkataraman, M., Mukhopadhyay, S. and Ramya, I. Hansen's disease: An unusual presentation J Family Med Prim Care; 2017, 6 (3): 666-668 doi: 10.4103/2249-4863.222041. **Address:** Department of Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Dermatology and Venereology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Pathology, **Christian Medical College, Vellore,** Tamil Nadu, India. Hansen's disease can present with varied and subtle symptoms which can be missed. A middle-aged gentleman presented with swelling of face and hands. Detailed examination and investigations confirmed borderline tuberculoid leprosy with lepra reaction. A high index of suspicion with vigilance can help to make an early diagnosis in this potentially treatable condition.	**NAT**	**JAN TO JUN**	**MEDICINE, DERMATOLOGY, PATHOLOGY**	**PMID:**29417030 **PMC ID:**5787977 **Impact Factor:** 0.670 **H-Index:** NA
193.	Georgy, J. T., Mathuram, A. J., George, A. A. and Chandramohan, J. Renal cell carcinoma presenting as a cutaneous horn and nodules on the gingiva and scalp BMJ Case Rep; 2017, 2017 **Address:** Medicine, **Christian Medical College and Hospital** Vellore, Vellore, Tamil Nadu, India. Dermatology, **Christian Medical College vellore**, Vellore, Tamil nadu, India. Pathology, **Christian Medical College and Hospital** Vellore, Vellore, Tamil Nadu, India. A 63-year-old man presented with a pulsatile cutaneous horn on the nose and	**INT**	**JUL TO DEC**	**MEDICINE UNIT I, DERMATOLOGY, PATHOLOGY**	**PMID:**28824000 **Impact Factor:**NA **H-Index:**11

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	multiple angiomatous nodules on the gingiva and scalp, which appeared over 2 months. He had severe hypercalcaemia, lytic lesions in multiple bones and acute kidney injury. Excision biopsy from the gingival nodule showed a clear cell neoplasm. The bone marrow showed atypical cells with similar morphology. Imaging showed a 7 cmx7.5 cm mass at the upper pole of the left kidney with metastases to the bones, liver and lung. Immunohistochemistry was consistent with metastatic renal cell carcinoma. Renal cell carcinoma presenting as a cutaneous horn is extremely rare and to the best of our knowledge only one other case was found in the literature. There was visible regression in the size of the cutaneous horn and nodules following initiation of pazopanib therapy. However, he succumbed to his illness a month later.				
194.	Ghosh, D. N., Karl, S. and Sen, S. Preperitoneal Bladder Augmentation: Feasibility and Results J Indian Assoc Pediatr Surg; 2017, 22 (4): 202-206 **Address:** Department of Pediatric Surgery, **Christian Medical College,** Ludhiana, Punjab, India. Department of Pediatric Surgery, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Pediatric Surgery, PSG Institute of Medical Sciences, Coimbatore, Tamil Nadu, India. INTRODUCTION: Bladder augmentation is an important part of pediatric reconstructive urology. This study was conducted to assess the feasibility and results of our technique of preperitoneal bladder augmentation. MATERIALS AND METHODS: Thirty-three children underwent preperitoneal bladder augmentation for small inelastic bladders who had failed medical management or needed undiversion. The underlying diagnosis included neurogenic bladder, valve bladder, bladder exstrophy, non-neurogenic neurogenic, ectopic ureters, and urogenital sinus. The operative procedure involved placing the entire augmentation in the preperitoneal or subcutaneous space after bivalving the native bladder. The augment segment of the bowel with its pedicle was brought into the preperitoneal space through a small opening in the parietal peritoneum. A Mitrofanoff port was also provided where needed. RESULTS: Preperitoneal augmentation provided an adequately compliant, good volume bladder except in children with bladder exstrophy or previous abdominal surgery. There was a good cystometric recovery,	**NAT**	**JUL TO DEC**	**PEDIATRIC SURGERY**	**PMID:**28974870 **PMCID:**5615892 **Impact Factor:**0.590 **H-Index:**11

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	with resolution of hydronephrosis and incontinence. Vesicoureteral reflux resolved in 24 of 26 units. In the 13 children who were uremic preoperatively, there was a significant decrease in serum creatinine levels, although 9 children continued to have supra-normal serum creatinine. Surgical complications seen were within expectations. There was no incidence of intraperitoneal leak, which is the main projected benefit of this procedure over the traditional "intraperitoneal" method of augmentation. CONCLUSIONS: The preperitoneal augmentation provides an adequate, safe, and low-pressure reservoir of urine except in cases of bladder exstrophy and previous abdominal surgery				
195.	Ghosh, G. C., Alex, A. G. and George, P. V. 'Chamber within a chamber': a rare cardiac anomaly Cardiology in the Young; 2017, 27 (7): 1423-1425 **Address:** Department of Cardiology,**Christian Medical College,** Vellore,India. Double-chambered left ventricle is a rare cardiac anomaly. We report a case of double-chambered left ventricle in a one-and-half-year-old asymptomatic boy. We depict the use of three-dimensional echocardiography in the demonstration and diagnosis of the condition.	**INT**	**JAN TO JUN**	**CARDIOLOGY**	**PMID:**28376932 **WOS:**000407211900032 **Impact Factor:**0.590 **H-Index:**11
196.	Ghosh, G. C., Bhadra, R., Ghosh, R. K., Banerjee, K. and Gupta, A. RVX 208: a novel BET protein inhibitor, role as an inducer of apo A-I/HDL and beyond Cardiovasc Ther; 2017, **Address:** Department of Cardiology, **Christian Medical College, Vellore,** India. Department of Medicine, St. Vincent Charity Medical Center, A Teaching Hospital of Case Western Reserve University, Cleveland, OH. Department of Cardiovascular Medicine, St. Vincent Charity Medical Center, A Teaching Hospital of Case Western Reserve University, Cleveland, OH. Cleveland clinic, Cleveland, OH. Low density cholesterol (LDL) has been the prime target of currently available lipid-lowering therapies although current research is expanding the focus beyond LDL lowering and has included high density cholesterol (HDL) also as the target. Bromo and extra-terminal (BET) proteins are implicated in the regulation of transcription of several regulatory genes and regulation of pro-inflammatory pathways. As	**INT**	**JAN TO JUN**	**CARDIOLOGY**	**PMID:**28423226 **Impact Factor:**2.478 **H-Index:**34

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	atherosclerosis is an inflammatory pathway and studies showed that BET inhibition has a role in inhibiting inflammation, the concept of BET inhibition came in the field of atherosclerosis. RVX 208 is a novel, orally active, BET protein inhibitor and the only BET inhibitor currently available in the field of atherosclerosis. RVX 208 acts primarily by increasing apo A-I (apolipoprotein A-I) and HDL levels. RVX 208 has a novel action of increasing larger, more cardio-protective HDL particles. Post hoc analysis of Phase II trials also showed that RVX 208 reduced major adverse cardiovascular events (MACE) in treated patients, over and above that of apo A-I/HDL increasing action. This MACE reducing actions of RVX 208 was largely due to its novel anti-inflammatory actions. Currently a phase III trial, BETonMACE is recruiting patients to look for the effects of RVX 208 in patients with increased risk of atherosclerotic cardiovascular disease. So BET inhibitors act in multiple ways to inhibit and modulate atherosclerosis and would be an emerging and potential option in the management of multifactorial disease like coronary artery disease by inhibiting a single substrate. But we need long-term phase III trial data's to look for effects on real world patients. This article is protected by copyright. All rights reserved.				
197.	Ghosh, G. C., Jose, J. and George, P. V. Postprandial angina: not always due to stenotic coronary artery disease BMJ Case Rep; 2017, 2017 **Address:** Department of Cardiology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India.	**INT**	**JUL TO DEC**	**CARDIOLOGY**	**PMID:**29102977 **Impact Factor:**NA **H-Index:**11
198.	Ghosh, G. C., Paul, A., Alex, A. G. and George, P. V. Penetrating mitral annular abscess ruptured into the left atrium: a rare cause of mitral regurgitation BMJ Case Rep; 2017, 2017 **Address:** Department of Cardiology, **Christian Medical College Hospital, Vellore,** Tamil Nadu, India.☐**Christian Medical College and Hospital** Vellore, Vellore, Tamil Nadu, India.	**INT**	**JAN TO JUN**	**CARDIOLOGY**	**PMID:**28228391 **Impact Factor:**NA **H-Index:**11
199.	Ghosh, G. C., Varghese, L. and Thomson, V. S. A dairy worker with fever and an abnormal echocardiogram Heart Asia; 2017, 9 (2): e010915 doi: 10.1136/heartasia-2017-010915. eCollection 2017.	**INT**	**JUL TO DEC**	**CARDIOLOGY UNIT III**	**PMID:**29560043 **PMC ID:**5854024

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Department of Cardiology, **Christian Medical College and Hospital, Vellore**, India. Description of the case: A 38-year-old male presented with history of progressively increasing dyspnoea of 25 days duration. He gave history of low -grade fever associated with malaise and weight loss over the preceding 6 months. He worked in the dairy industry in the Middle East and returned to India owing to his illness. On clinical examination, he was found to be tachypneic and cachectic. Jugular venous pressure was raised with a prominent 'a' wave. There was a short early diastolic murmur over the aortic area. His blood investigations, including renal and liver function tests, were normal. Three sets of blood cultures were sterile. Two-dimensional trans-thoracic and trans-oesophageal echocardiography revealed thickened bicuspid aortic valve cusps, with moderate eccentric aortic regurgitation and an abnormal structure posterior to the left ventricular outflow tract and aorta (figure 1A-C). A small vegetation was seen attached to the fused right-left aortic cusp (supplementary figure 1). The patient was started on appropriate intravenous antibiotics and antifailure medications, and was referred for early surgical treatment.Figure 1(A) Transthoracic echocardiography parasternal long axis view. (B) Transesophageal echocardiography (mid esophageal level) long axis view. (C) Transthoracic echocardiography parasternal short axis view.10.1136/heartasia-2017-010915.supp1Supplementary Figure 1. Question: Identify the structure depicted in the images (figure 1A-C).Answer options:Cor triatriatumAortic dissectionLeft atrial pseudoaneurysmPseudoaneurysm of the mitral aortic inter-valvular fibrosaAortic root abscess.				
200.	Giri, S., Rajan, A. K., Kumar, N., Dhanapal, P., Venkatesan, J., Iturriza-Gomara, M., Taniuchi, M., John, J., Abraham, A. M. and Kang, G. Comparison of culture, single and multiplex real-time PCR for detection of Sabin poliovirus shedding in recently vaccinated Indian children J Med Virol; 2017, 89 (8): 1485-1488 **Address:** Department of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India.Department of Clinical Virology, **Christian Medical College, Vellore,** India. Institute of Infection and Global Health, University of Liverpool, Liverpool, United Kingdom. Division of Infectious Diseases and International Health,	**INT**	**JAN TO JUN**	**WELLCOME TRUST RESEARCH LABORATORY, CLINICAL VIROLOGY, COMMUNITY MEDICINE**	**PMID:**28213965 **Impact Factor:** 1.935 **H-Index:**102

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	University of Virginia School of Medicine, Charlottesville, Virginia. Department of Community Medicine, **Christian Medical College, Vellore,** India. Although, culture is considered the gold standard for poliovirus detection from stool samples, real-time PCR has emerged as a faster and more sensitive alternative. Detection of poliovirus from the stool of recently vaccinated children by culture, single and multiplex real-time PCR was compared. Of the 80 samples tested, 55 (68.75%) were positive by culture compared to 61 (76.25%) and 60 (75%) samples by the single and one step multiplex real-time PCR assays respectively. Real-time PCR (singleplex and multiplex) is more sensitive than culture for poliovirus detection in stool, although the difference was not statistically significant.				
201.	Global, regional, and national disability-adjusted life-years (DALYs) for 333 diseases and injuries and healthy life expectancy (HALE) for 195 countries and territories, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet. 2017 Sep 16;390(10100):1260-1344. doi: 10.1016/S0140-6736(17)32130-X. **GBD 2016 DALYs and HALE Collaborators.** Collaborators: Hay SI, Abajobir AA, Abate KH, Abbafati C, Abbas KM, Abd-Allah F, Abdulkader RS, Abdulle AM, Abebo TA, Abera SF, Aboyans V, Abu-Raddad LJ, Ackerman IN, Adedeji IA, Adetokunboh O, Afshin A, Aggarwal R, Agrawal S, Agrawal A, Ahmed MB, Aichour MTE, Aichour AN, Aichour I, Aiyar S, Akinyemiju TF, Akseer N, Al Lami FH, Alahdab F, Al-Aly Z, Alam K, Alam N, Alam T, Alasfoor D, Alene KA, Ali R, Alizadeh-Navaei R, Alkaabi JM, Alkerwi A, Alla F, Allebeck P, Allen C, Al-Maskari F, AlMazroa MA, Al-Raddadi R, Alsharif U, Alsowaidi S, Althouse BM, Altirkawi KA, Alvis-Guzman N, Amare AT, Amini E, Ammar W, Amoako YA, Ansha MG, Antonio CAT, Anwari P, Ärnlöv J, Arora M, Artaman A, Aryal KK, Asgedom SW, Atey TM, Atnafu NT, Avila-Burgos L, Avokpaho EFGA, Awasthi A, Awasthi S, Azarpazhooh MR, Azzopardi P, Babalola TK, Bacha U, Badawi A, Balakrishnan K, Bannick MS, Barac A, Barker-Collo SL, Bärnighausen T, Barquera S, Barrero LH, Basu S, Battista R, Battle KE, Baune BT, Bazargan-Hejazi S, Beardsley J, Bedi N, Béjot Y, Bekele BB, Bell ML, Bennett DA, Bennett JR, Bensenor IM, Benson J, Berhane A, Berhe DF, Bernabé E, Betsu BD, Beuran M, Beyene AS, Bhansali A,	**INT**	**JUL TO DEC**	**PULMONARY MEDICINE**	**PMID:**28919118 **PMCID:** **PMC**5605707 **WOS:**000410630000005 **Impact Factor:** 47.831 **H-Index:**646

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Bhatt S, Bhutta ZA, Biadgilign S, Bicer BK, Bienhoff K, Bikbov B, Birungi C, Biryukov S, Bisanzio D, Bizuayehu HM, Blyth FM, Boneya DJ, Bose D, Bou-Orm IR, Bourne RRA, Brainin M, Brayne C, Brazinova A, Breitborde NJK, Briant PS, Britton G, Brugha TS, Buchbinder R, Bulto LNB, Bumgarner BR, Butt ZA, Cahuana-Hurtado L, Cameron E, Campos-Nonato IR, Carabin H, Cárdenas R, Carpenter DO, Carrero JJ, Carter A, Carvalho F, Casey D, Castañeda-Orjuela CA, Castle CD, Catalá-López F, Chang JC, Charlson FJ, Chaturvedi P, Chen H, Chibalabala M, Chibueze CE, Chisumpa VH, Chitheer AA, Chowdhury R, **Christopher DJ**, Ciobanu LG, Cirillo M, Colombara D, Cooper LT, Cooper C, Cortesi PA, Cortinovis M, Criqui MH, Cromwell EA, Cross M, Crump JA, Dadi AF, Dalal K, Damasceno A, Dandona L, Dandona R, das Neves J, Davitoiu DV, Davletov K, de Courten B, De Leo D, De Steur H, Defo BK, Degenhardt L, Deiparine S, Dellavalle RP, Deribe K, Deribew A, Des Jarlais DC, Dey S, Dharmaratne SD, Dhillon PK, Dicker D, Djalainia S, Do HP, Dokova K, Doku DT, Dorsey ER, Dos Santos KPB, Driscoll TR, Dubey M, Duncan BB, Ebel BE, Echko M, El-Khatib ZZ, Enayati A, Endries AY, Ermakov SP, Erskine HE, Eshetie S, Eshrati B, Esteghamati A, Estep K, Fanuel FBB, Farag T, Farinha CSES, Faro A, Farzadfar F, Fazeli MS, Feigin VL, Feigl AB, Fereshtehnejad SM, Fernandes JC, Ferrari AJ, Feyissa TR, Filip I, Fischer F, Fitzmaurice C, Flaxman AD, Foigt N, Foreman KJ, Franklin RC, Frostad JJ, Fullman N, Fürst T, Furtado JM, Futran ND, Gakidou E, Garcia-Basteiro AL, Gebre T, Gebregergs GB, Gebrehiwot TT, Geleijnse JM, Geleto A, Gemechu BL, Gesesew HA, Gething PW, Ghajar A, Gibney KB, Gillum RF, Ginawi IAM, Gishu MD, Giussani G, Godwin WW, Goel K, Goenka S, Goldberg EM, Gona PN, Goodridge A, Gopalani SV, Gosselin RA, Gotay CC, Goto A, Goulart AC, Graetz N, Gugnani HC, Gupta PC, Gupta R, Gupta T, Gupta V, Gupta R, Gutiérrez RA, Hachinski V, Hafezi-Nejad N, Hailu AD, Hailu GB, Hamadeh RR, Hamidi S, Hammami M, Handal AJ, Hankey GJ, Hao Y, Harb HL, Hareri HA, Haro JM, Harun KM, Harvey J, Hassanvand MS, Havmoeller R, Hay RJ, Hedayati MT, Hendrie D, Henry NJ, Heredia-Pi IB, Heydarpour P, Hoek HW, Hoffman HJ, Horino M, Horita N, Hosgood HD, Hostiuc S, Hotez PJ, Hoy DG, Htet AS, Hu G, Huang JJ, Huynh C, Iburg KM, Igumbor EU, Ikeda C, Irvine CMS, Islam SM S, Jacobsen KH, Jahanmehr N, Jakovljevic MB, James P, Jassal SK, Javanbakht M, Jayaraman SP, Jeemon P, Jensen PN, Jha V, Jiang G, John D, Johnson CO, Johnson SC, Jonas JB, Jürisson M, Kabir Z, Kadel R, Kahsay A, Kamal R, Kar C, Karam NE, Karch A, Karema CK, Karimi SM, Karimkhani C, Kasaeian A, Kassa GM, Kassaw NA, Kassebaum NJ, Kastor A, Katikireddi SV, Kaul A, Kawakami N, Keiyoro PN, Kemmer L, Kengne AP, Keren A, Kesavachandran CN, Khader YS, Khalil IA, Khan EA, Khang YH, Khoja AT, Khosravi A, Khubchandani J, Kiadaliri AA, Kieling C, Kim YJ, Kim D,				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Kimokoti RW, Kinfu Y, Kisa A, Kissimova-Skarbek KA, Kissoon N, Kivimaki M, Knudsen AK, Kokubo Y, Kolte D, Kopec JA, Kosen S, Kotsakis GA, Koul PA, Koyanagi A, Kravchenko M, Krohn KJ, Kumar GA, Kumar P, Kyu HH, Lager ACJ, Lal DK, Lalloo R, Lallukka T, Lambert N, Lan Q, Lansingh VC, Larsson A, Leasher JL, Lee PH, Leigh J, Leshargie CT, Leung J, Leung R, Levi M, Li Y, Li Y, Liang X, Liben ML, Lim SS, Linn S, Liu PY, Liu A, Liu S, Liu Y, Lodha R, Logroscino G, Looker KJ, Lopez AD, Lorkowski S, Lotufo PA, Lozano R, Lucas TCD, Lunevicius R, Lyons RA, Macarayan ERK, Maddison ER, Magdy Abd El Razek HMA, Magdy Abd El Razek M, Magis-Rodriguez C, Mahdavi M, Majdan M, Majdzadeh R, Majeed A, Malekzadeh R, Malhotra R, Malta DC, Mamun AA, Manguerra H, Manhertz T, Mantovani LG, Mapoma CC, March LM, Marczak LB, Martinez-Raga J, Martins PHV, Martins-Melo FR, Martopullo I, März W, Mathur MR, Mazidi M, McAlinden C, McGaughey M, McGrath JJ, McKee M, Mehata S, Meier T, Meles KG, Memiah P, Memish ZA, Mendoza W, Mengesha MM, Mengistie MA, Mengistu DT, Mensah GA, Meretoja TJ, Meretoja A, Mezgebe HB, Micha R, Millear A, Miller TR, Minnig S, Mirarefin M, Mirrakhimov EM, Misganaw A, Mishra SR, Mitchell PB, Mohammad KA, Mohammadi A, Mohammed MSK, Mohammed KE, Mohammed S, Mohan MBV, Mokdad AH, Mollenkopf SK, Monasta L, Montañez Hernandez JC, Montico M, Moradi-Lakeh M, Moraga P, Morawska L, Mori R, Morrison SD, Moses M, Mountjoy-Venning C, Mruts KB, Mueller UO, Muller K, Murdoch ME, Murthy GVS, Murthy S, Musa KI, Nachega JB, Nagel G, Naghavi M, Naheed A, Naidoo KS, Nangia V, Nasher JT, Natarajan G, Negasa DE, Negoi RI, Negoi I, Newton CR, Ngunjiri JW, Nguyen CT, Nguyen QL, Nguyen TH, Nguyen G, Nguyen M, Nichols E, Ningrum DNA, Nong VM, Norheim OF, Norrving B, Noubiap JJN, Nyandwi A, Obermeyer CM, O'Donnell MJ, Ogbo FA, Oh IH, Okoro A, Oladimeji O, Olagunju AT, Olagunju TO, Olsen HE, Olusanya BO, Olusanya JO, Ong K, Opio JN, Oren E, Ortiz A, Osborne RH, Osgood-Zimmerman A, Osman M, Ota E, Owolabi MO, Pa M, Pacella RE, Panda BK, Pandian JD, Papachristou C, Park EK, Parry CD, Parsaeian M, Patil ST, Patten SB, Patton GC, Paudel D, Paulson K, Pearce N, Pereira DM, Perez KM, Perico N, Pesudovs K, Peterson CB, Petri WA, Petzold M, Phillips MR, Phipps G, Pigott DM, Pillay JD, Pinho C, Piradov MA, Plass D, Pletcher MA, Popova S, Poulton RG, Pourmalek F, Prabhakaran D, Prasad N, Purcell C, Purwar M, Qorbani M, Quintanilla BPA, Rabiee RHS, Radfar A, Rafay A, Rahimi K, Rahimi-Movaghar A, Rahimi-Movaghar V, Rahman MHU, Rahman MA, Rahman M, Rai RK, Rajsic S, Ram U, Ranabhat CL, Rangaswamy T, Rankin Z, Rao PV, Rao PC, Rawaf S, Ray SE, Reiner RC, Reinig N, Reitsma M, Remuzzi G, Renzaho AMN, Resnikoff S, Rezaei S, Ribeiro AL, Rivas JC, Roba HS, Robinson SR, Rojas-Rueda D, Rokni MB, Ronfani L, Roshandel G, Roth				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	GA, Rothenbacher D, Roy A, Rubagotti E, Ruhago GM, Saadat S, Safdarian M, Safiri S, Sagar R, Sahathevan R, Sahraian MA, Salama J, Saleh MM, Salomon JA, Salvi SS, Samy AM, Sanabria JR, Sanchez-Niño MD, Santomauro D, Santos JV, Santos IS, Santric Milicevic MM, Sartorius B, Satpathy M, Sawhney M, Saxena S, Schelonka K, Schmidt MI, Schneider IJC, Schöttker B, Schutte AE, Schwebel DC, Schwendicke F, Seedat S, Sepanlou SG, Servan-Mori EE, Shaheen A, Shaikh MA, Shamsipour M, Sharma R, Sharma J, She J, Shi P, Shibuya K, Shields C, Shifa GT, Shiferaw MS, Shigematsu M, Shiri R, Shirkoohi R, Shirude S, Shishani K, Shoman H, Siabani S, Sibai AM, Sigfusdottir ID, Silberberg DH, Silva DAS, Silva JP, Silveira DGA, Singh JA, Singh OP, Singh NP, Singh V, Sinha DN, Skiadaresi E, Slepak EL, Smith DL, Smith M, Sobaih BHA, Sobngwi E, Soljak M, Sorensen RJD, Sousa TCM, Sposato LA, Sreeramareddy CT, Srinivasan V, Stanaway JD, Stathopoulou V, Steel N, Stein DJ, Steiner C, Steinke S, Stokes MA, Stovner LJ, Strub B, Subart M, Sufiyan MB, Sunguya BF, Sur PJ, Swaminathan S, Sykes BL, Sylte D, Szoeke CEI, Tabarés-Seisdedos R, Tadakamadla SK, Taffere GR, Takala JS, Tandon N, Tanne D, Tarekegn YL, Tavakkoli M, Taveira N, Taylor HR, Tegegne TK, Tehrani-Banihashemi A, Tekelab T, Terkawi AS, Tesfaye DJ, Tesssema B, Thakur JS, Thamsuwan O, Theadom AM, Theis AM, Thomas KE, Thomas N, Thompson R, Thrift AG, Tobe-Gai R, Tobollik M, Tonelli M, Topor-Madry R, Tortajada M, Touvier M, Traebert J, Tran BX, Troeger C, Truelsen T, Tsoi D, Tuzcu EM, Tymeson H, Tyrovolas S, Ukwaja KN, Undurraga EA, Uneke CJ, Updike R, Uthman OA, Uzochukwu BSC, van Boven JFM, Varughese S, Vasankari T, Veerman LJ, Venkatesh S, Venketasubramanian N, Vidavalur R, Vijayakumar L, Violante FS, Vishnu A, Vladimirov SK, Vlassov VV, Vollset SE, Vos T, Wadilo F, Wakayo T, Wallin MT, Wang YP, Weichenthal S, Weiderpass E, Weintraub RG, Weiss DJ, Werdecker A, Westerman R, Whiteford HA, Wijeratne T, Williams HC, Wiysonge CS, Woldeyes BG, Wolfe CDA, Woodbrook R, Woolf AD, Workicho A, Xavier D, Xu G, Yadgir S, Yaghoubi M, Yakob B, Yan LL, Yano Y, Ye P, Yihdego MG, Yimam HH, Yip P, Yonemoto N, Yoon SJ, Yotebieng M, Younis MZ, Yu C, Zaidi Z, Zaki MES, Zegeye EA, Zenebe ZM, Zhang X, Zheng Y, Zhou M, Zipkin B, Zodpey S, Zoeckler L, Zuhlke LJ, Murray CJL. BACKGROUND: Measurement of changes in health across locations is useful to compare and contrast changing epidemiological patterns against health system performance and identify specific needs for resource allocation in research, policy development, and programme decision making. Using the Global Burden of Diseases, Injuries, and Risk Factors Study 2016, we drew from two widely used summary measures to monitor such changes in population health: disability-				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	adjusted life-years (DALYs) and healthy life expectancy (HALE). We used these measures to track trends and benchmark progress compared with expected trends on the basis of the Socio-demographic Index (SDI). METHODS: We used results from the Global Burden of Diseases, Injuries, and Risk Factors Study 2016 for all-cause mortality, cause-specific mortality, and non-fatal disease burden to derive HALE and DALYs by sex for 195 countries and territories from 1990 to 2016. We calculated DALYs by summing years of life lost and years of life lived with disability for each location, age group, sex, and year. We estimated HALE using age-specific death rates and years of life lived with disability per capita. We explored how DALYs and HALE differed from expected trends when compared with the SDI: the geometric mean of income per person, educational attainment in the population older than age 15 years, and total fertility rate. FINDINGS: The highest globally observed HALE at birth for both women and men was in Singapore, at 75·2 years (95% uncertainty interval 71·9-78·6) for females and 72·0 years (68·8-75·1) for males. The lowest for females was in the Central African Republic (45·6 years [42·0-49·5]) and for males was in Lesotho (41·5 years [39·0-44·0]). From 1990 to 2016, global HALE increased by an average of 6·24 years (5·97-6·48) for both sexes combined. Global HALE increased by 6·04 years (5·74-6·27) for males and 6·49 years (6·08-6·77) for females, whereas HALE at age 65 years increased by 1·78 years (1·61-1·93) for males and 1·96 years (1·69-2·13) for females. Total global DALYs remained largely unchanged from 1990 to 2016 (-2·3% [-5·9 to 0·9]), with decreases in communicable, maternal, neonatal, and nutritional (CMNN) disease DALYs offset by increased DALYs due to non-communicable diseases (NCDs). The exemplars, calculated as the five lowest ratios of observed to expected age-standardised DALY rates in 2016, were Nicaragua, Costa Rica, the Maldives, Peru, and Israel. The leading three causes of DALYs globally were ischaemic heart disease, cerebrovascular disease, and lower respiratory infections, comprising 16·1% of all DALYs. Total DALYs and age-standardised DALY rates due to most CMNN causes decreased from 1990 to 2016. Conversely, the total DALY burden rose for most NCDs; however, age-standardised DALY rates due to NCDs declined globally. INTERPRETATION: At a global level, DALYs and HALE continue to show improvements. At the same time, we observe that many populations are facing growing functional health loss. Rising SDI was associated with increases in cumulative years of life lived with disability and decreases in CMNN DALYs offset by increased NCD DALYs. Relative compression of morbidity highlights the importance of continued health interventions, which has changed in most locations in pace with the gross domestic product per person, education, and family				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	planning. The analysis of DALYs and HALE and their relationship to SDI represents a robust framework with which to benchmark location-specific health performance. Country-specific drivers of disease burden, particularly for causes with higher-than-expected DALYs, should inform health policies, health system improvement initiatives, targeted prevention efforts, and development assistance for health, including financial and research investments for all countries, regardless of their level of sociodemographic development. The presence of countries that substantially outperform others suggests the need for increased scrutiny for proven examples of best practices, which can help to extend gains, whereas the presence of underperforming countries suggests the need for devotion of extra attention to health systems that need more robust support. FUNDING: Bill & Melinda Gates Foundation. Copyright © 2017 The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY 4.0 license. Published by Elsevier Ltd.. All rights reserved. DOI: 10.1016/S0140-6736(17)32130-X				
202.	Godson, H. F., Manickam, R., Saminathan, S., Ganesh, K. M. and Ponmalar, R. The effect of influence quantities and detector orientation on small-field patient-specific IMRT QA: comparison of measurements with various ionization chambers Radiol Phys Technol; 2017, 10 (2): 195-203 **Address:** Department of Radiation Physics, Kidwai Memorial Institute of Oncology, Dr. M.H. Marigowda Road, Bangalore, 560 029, India. Department of Radiotherapy, **Christian Medical College, Vellore,** India. Department of Radiation Physics, Kidwai Memorial Institute of Oncology, Dr. M.H. Marigowda Road, Bangalore, 560 029, India. drmravi59@yahoo.com. Intensity-modulated radiation therapy (IMRT) requires a patient-specific quality assurance (QA) program to validate the treatment plan and a high level of dosimetric accuracy in the treatment delivery. Dosimetric verification generally consists of both absolute- and relative-dose measurements in a phantom using ionization chambers. Measurements were carried out with three different ionization chambers (Scanditronix FC 65G, Exradin A18, and PTW PinPoint 31014) to assess the effects of influence quantities such as the stability, pre- and post-irradiation leakage, stem effect, polarity, and ion recombination on the IMRT point-dose verification with two different orientations. The Exradin A18 and PTW PinPoint ion chambers demonstrated noticeable leakage to magnitudes of 0.6 and 1.2%,	**INT**	**JAN TO JUN**	**RADIOTHERAPY**	**PMID:**27910001 **Impact Factor:**0.700 **H-Index:**13

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	whereas negligible leakage was observed with FC 65G ion chamber. Maximum deviations of 0.5 and 0.6% were noticed for the smallest field owing to the ion recombination effect with the PTW PinPoint ion chamber in the parallel and perpendicular orientations, respectively. The calculated total uncertainties of all influence quantities for the FC 65G, A18, and PTW PinPoint ion chambers were 0.5, 0.7, and 1.3%, respectively. The uncertainties determined for each chamber were incorporated into the point-dose measurements of 30 head and neck patient-specific QA plans, and the variation was found to be within +/-3%. The magnitude of the leakage in a small-volume ion chamber indicated the significance of incorporating the correction factors in the absolute-dose measurement. A paired t test analysis indicated that the influence quantities significantly affect the point-dose measurements in the patient-specific IMRT QA.				
203.	Goel, A., Raghupathy, V., Amirtharaj, G. J., Chapla, A., Venkatraman, A., Ramakrishna, B., Ramachandran, A., Thomas, N., Balasubramanian, K. A., Mackie, I., Elias, E. and Eapen, C. E. ADAMTS13 missense variants associated with defective activity and secretion of ADAMTS13 in a patient with non-cirrhotic portal hypertension Indian J Gastroenterol; 2017, 36 (5): 380-389 **Address:** Department of Hepatology, **Christian Medical College, Vellore,** 632 004, India. Department of Wellcome Research Unit, **Christian Medical College, Vellore,** 632 004, India. Department of Endocrinology, **Christian Medical College, Vellore,** 632 004, India. Department of Center for Stem Cell Research, **Christian Medical College, Vellore,** 632 004, India. Department of Pathology, **Christian Medical College, Vellore,** 632 004, India. Haemostasis Research Unit, Haematology Department, University College London, London, UK. Liver Unit, University Hospital Birmingham, Birmingham, UK. Department of Hepatology, **Christian Medical College, Vellore,** 632 004, India. eapen@cmcvellore.ac.in. BACKGROUND: Non-cirrhotic intrahepatic portal hypertension (NCIPH) is characterized by thrombotic microangiopathy of the portal venous system, low ADAMTS13 (a disintegrin-like and metalloproteinase with thrombospondin type 1	**NAT**	**JUL TO DEC**	**HEPATOLOGY, WELLCOME RESEARCH UNIT, ENDOCRINOLOGY, CENTRE FOR STEM CELL RESEARCH, PATHOLOGY, HEPATOLOGY**	**PMID:**28980147 **Impact Factor:**0.690 **H-Index:**34

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	motifs-13), and high vWF (von Willebrand factor) levels. This study aimed to screen for ADAMTS13 mutations, focusing on the CUB domain, in these patients. METHODS: Prospectively recruited NCIPH patients and healthy volunteers underwent tests for plasma vWF-ADAMTS13 balance. Sanger sequencing of the CUB domain of ADAMTS13 was done in a subset of the NCIPH patients, and the detected mutation was screened for in all the study participants. Next-generation sequencing of clinically relevant exome and liver immunostaining for ADAMTS13 was done in patients with detected ADAMTS13 mutation. RESULTS: Plasma vWF-ADAMTS13 balance was significantly altered in 24 NCIPH patients (Child's class A:23, B:1) as compared to 22 controls. On initial sequencing of the CUB domain (17 cases and 3 controls), one NCIPH patient showed a rare missense variant (SNV) at position c.3829C >T resulting in p.R1277W (rs14045669). Subsequent RFLP analysis targeted to the R1277W variant did not detect this in any other NCIPH patient, nor in any of the 22 controls. The NCIPH patient with the R1277W variant had severe ADAMTS13 deficiency, consistently high vWF, other missense SNVs in ADAMTS13, vWF, and complement genes. Immunostaining of his liver biopsy revealed globules of ADAMTS13 within stellate cells. CONCLUSIONS: We report missense variants in ADAMTS13, vWF, and complement genes in a patient with NCIPH who had decreased secretion and activity of ADAMTS13 protein. Further studies are needed in NCIPH patients in this regard.				
204.	Goel, R., Danda, D., Joseph, G., Ravindran, R., Kumar, S., Jayaseelan, V., Jayaseelan, L. and Bacon, P. Long-term outcome of 251 patients with Takayasu arteritis on combination immunosuppressant therapy: Single centre experience from a large tertiary care teaching hospital in Southern India Semin Arthritis Rheum; 2017, **Address:** Department of Clinical Immunology and Rheumatology, **Christian Medical College, Vellore** 632004, India. Department of Clinical Immunology and Rheumatology, **Christian Medical College, Vellore** 632004, India. Electronic address: debashisdandacmc@hotmail.com. Department of Cardiology, **Christian Medical College, Vellore,** India. Department of Child Health, **Christian Medical College, Vellore,** India. Department of Biostatistics, **Christian Medical College, Vellore,** India. Rheumatology Research Group, College of Medicine and Dentistry, University of Birmingham, Birmingham, UK.	**INT**	**JUL TO DEC**	**CLINICAL IMMUNOLOGY AND RHEUMATOLOGY, CARDIOLOGY, CHILD HEALTH, BIOSTATISTICS**	**PMID:**29096935 **Impact Factor:** 4.498 **H-Index:**94

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	INTRODUCTION: Long-term outcome studies in Takayasu arteritis (TA) are few and limited by small sample size. In this study, we analysed the outcome of treatment in a large series of TA patients with a minimum follow-up period of >/=12 months by objective instruments. MATERIALS AND METHODS: Patients with TA satisfying the 1990 ACR, Ishikawa's, Sharma's or EULAR/PRESS criteria were recruited from our clinics between 1998 and 2016. Only patients with a minimum follow up of 12 months were studied. Data related to clinical presentation, disease extent (DEI.Tak score), activity [Indian Takayasu arteritis clinical activity score, that is, ITAS-A (CRP)] and damage score [Takayasu arteritis damage score (TADS)], angiography and treatment were collected for all patients. Response to treatment was categorised as complete response (CR), partial response (PR) or refractory disease. Patients with sustained CR on prednisolone dose of </=5mg/day were classified as having sustained inactive disease. Appropriate statistical tests were used for parametric and non-parametric data. Relapse free survival was projected by Kaplan-Meir curve. Cox proportional hazards regression plot was used to compare the efficacy of medications. Predictors of sustained response were identified by logistic regression and a prediction model was constructed. RESULTS: Among 503 TA patients examined during study period, 251 had follow-up of >/=12 months and were included in this study. Median follow-up duration was 42 months (IQR: 24-81, maximum 240 months). Patients (81.7% females, mean age of 29.2 +/- 11.8 years, symptom duration of 24 [6-70] months) were treated by a uniform protocol that included high dose steroids (n = 239) plus concurrent steroid-sparing immunosuppressant (n = 235) with mycophenolate in majority. Biological agents (n = 44 patients) and revascularisation procedures were used in symptomatic patients after control of disease activity. At 1st follow-up, CR (ITAS2010 = 0, CRP < 6mg/L and non-progressive disease on angiography) was observed in 173 (68.9%), partial response (PR) in 42 (16.7%) and no response was seen in only 36 (14%) patients. CR was sustained till the last follow up in 116 (65.9%) of 173 patients with initial CR, while 87 (49.4%) of them achieved sustained inactive disease. Disease activity relapsed at a median duration of 37 (29.9-44.1) months in 56 patients. Cumulative relapse free survival was 93%, 73%, 66% and 52% at 1, 3, 5 and 10 years, respectively. Baseline CRP < 6.2, DEI.Tak < 9 and angiographic type 4 disease predicted sustained inactive disease and a model comprising these parameters showed sensitivity and specificity of 70% and 61.1%. Two fatalities were observed. New vascular lesions during follow up were observed in 50 (19.9%) patients. Overall, 92.8% had at least one period of CR or PR while 7.2% were refractory to treatment till the last follow up. Damage progression				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	(TADS > 1) was arrested in 68% of patients and was lower in patients with sustained inactive disease [0 (0-1)] as compared to the rest [1 (0-2.75)], p = 0.000. Both early response as well as cumulative hazard for relapse were similar between patients initiated on 0.5 and 1mg/kg/day steroids. CONCLUSIONS: Our strategy of upfront combination immunosuppressant therapy stabilised disease activity in 92.8% of patients, while 7.2% had true refractory disease. Relapse free survival was 66% at 5 years and 52% at 10 years. Damage progression was arrested in 68% and only 2 fatalities were observed. Initial steroid dose of 0.5mg/kg/day had similar efficacy as 1mg/kg/day dose.				
205.	Goel, R., Kabeerdoss, J., Mohan, H., Danda, S., Jayaseelan, V., Kumar, T. S., Jude, J., Bacon, P., Joseph, G. and Danda, D. Soluble-HLA-E: A follow up biomarker in Takayasu arteritis, independent of HLA-E genotype Int J Rheum Dis; 2017, **Address:** Department of Clinical Immunology and Rheumatology, **Christian Medical College, Vellore,** India. Department of Medical Genetics, **Christian Medical College, Vellore,** India. Department of Biostatistics, **Christian Medical College, Vellore,** India. Department of Child Health, **Christian Medical College, Vellore,** India. Department of Microbiology, **Christian Medical College, Vellore,** India. School of Immunity and Infection, College of Medicine and Dentistry, University of Birmingham, Birmingham, UK. Department of Cardiology, **Christian Medical College, Vellore,** India. **AIM:** Disease activity assessment in Takayasu arteritis (TA) is challenging. Human leukocyte antigen E (HLA-E) is shed from endothelium into serum as a soluble molecule (sHLA-E) in response to inflammation. We aimed to study: (i) utility of sHLA-E as a biomarker of disease activity; and (ii) association of HLA-E polymorphism rs1264457 with clinical disease in Asian-Indian TA patients. **MATERIALS AND METHODS:** In phase-1, sHLA-E levels were estimated in sera of 50 consecutive TA patients at baseline visit and 27 healthy controls. Serial estimations were performed in 27 of them. In phase-2, DNA of 150 TA patients and 264 healthy controls were genotyped for rs1264457 polymorphism. **RESULTS:** At baseline visit, disease was classified as active, stable and grumbling	**INT**	**JAN TO JUN**	**RHEUMATOLOGY, MEDICAL GENETICS, BIOSTATISTICS, CHILD HEALTH, CLINICAL MICROBIOLOGY, CARDIOLOGY**	**PMID:**28425192 **Impact Factor:** 2.624 **H-Index:**27

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	in 23, 18 and nine patients, respectively. sHLA-E levels were higher in active TA (43; interquartile range [IQR]: 25.3-64.6) pg/mL) than stable disease (12.9; IQR: 7.6-21.6 pg/mL) (P = 0.001). At first follow-up visit, sHLA-E levels were numerically higher in active disease than stable disease (P = 0.06) but this trend was blunted at second follow-up. sHLA-E levels increased in 54% versus 25% of patients with persistently active/relapsing and persistent stable course, respectively. rs1264457 polymorphism was not associated with susceptibility to TA and did not affect sHLA-E levels. **CONCLUSION:** sHLA-E level is useful as a biomarker of disease activity and course in TA patients. rs1264457 polymorphism is neither associated with susceptibility nor did it influence sHLA-E levels in TA.				
206.	Goel, R., Kabeerdoss, J., Ram, B., Prakash, J. A., Babji, S., Nair, A., Jeyaseelan, L., Jeyaseelan, V., Mathew, J., Balaji, V., Joseph, G. and Danda, D. Serum Cytokine Profile in Asian Indian Patients with Takayasu Arteritis and its Association with Disease Activity Open Rheumatol J; 2017, 11 23-29 **Address:** Department of Clinical Immunology and Rheumatology, **Christian Medical College, Vellore**-632004, Tamil Nadu, India. Department of Clinical Microbiology, **Christian Medical College, Vellore**-632004, Tamil Nadu, India. Wellcome Trust Research Laboratories, Division of Gastro Intestinal Sciences **Christian Medical College, Vellore**- 632004, Tamil Nadu, India. Department of Biostatistics, **Christian Medical College, Vellore**-632004, Tamil Nadu, India. Department of Cardiology, **Christian Medical College, Vellore**-632004, Tamil Nadu, India. **BACKGROUND:** Arterial inflammation Takayasu arteritis (TA) is an outcome of balance between pro- and anti-inflammatory cytokines. Comprehensive assessment of these cytokines is important for understanding pathogenesis and assessing disease activity. **OBJECTIVE:** To study pro- and anti-inflammatory cytokines representing different T-helper cell pathway in serum samples of Asian Indian patients with TA and to assess their association with disease activity. **METHODS:** Consecutive Indian patients with TA were assayed for serum interferon-gamma, interleukin-6, interleukin-23, interleukin-17, interleukin-10 and transforming growth factor- beta levels at baseline and follow up visit. Patients were grouped into active and stable disease based on Indian Takyasu Arteritis	**INT**	**JAN TO JUN**	**CLINICAL IMMUNOLOGY AND RHEUMATOLOGY, CLINICAL MICROBIOLOGY, WELLCOME TRUST RESEARCH LABORATORIES, BIOSTATISTICS, CARDIOLOGY,**	**PMID:**28400869 **Impact Factor:**1.360 **H-Index:**17

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	clinical Activity Score-2010. Serum levels of these cytokines between active and stable disease and between baseline and follow up visits were compared by non-parametric tests. **RESULTS:** Among 32 patients enrolled, 15 were classified as active while 17 as stable disease at baseline. IFN-gamma levels were significantly higher in active disease than stable disease (p=0.0129) while other cytokines did not differ significantly between 2 groups. Serum levels of none of the cytokines changed significantly over 2 visits in both responders and non-responders. IL23 levels positively correlate with disease duration ((r=0.999; p<0.005). Modest correlation was observed between IFN-gamma and IL23 levels at both baseline and follow up and between IFN-gamma and IL-6 and CRP at follow up. **CONCLUSION:** IFN-gamma levels are raised in active disease in TA and correlates well with other biomarkers of disease activity and proinflammatory cytokines. There is also a direct correlation between Il-23 levels and disease duration.				
207.	Goel, R., Nair, A., Kabeerdoss, J., Mohan, H., Jeyaseelan, V., Joseph, G. and Danda, D. Study of serial serum myeloid-related protein 8/14 as a sensitive biomarker in Takayasu arteritis: a single centre study Rheumatol Int; 2017, **Address:** Department of Clinical Immunology and Rheumatology, **Christian Medical College, Vellore,** 632004, India. Department of Biostatistics, **Christian Medical College, Vellore,** 632004, India. Department of Cardiology, **Christian Medical College, Vellore,** 632004, India. Department of Clinical Immunology and Rheumatology, **Christian Medical College, Vellore,** 632004, India. debashisdandacmc@hotmail.com. The aim of the study was to explore utility of serial serum myeloid-related protein 8/14 (MRP8/14) as a biomarker of clinical disease activity and angiographic progression in Takayasu arteritis (TA). Serum MRP8/14 levels were assayed by commercial ELISA for 85 TA patients and 24 healthy controls at baseline, and for 56 and 21 TA patients during follow-up visits R1 and R2, respectively. Disease was categorised as active, indeterminate and stable according to Indian Takayasu Arteritis score (ITAS 2010), ITAS-A(CRP) and angiography. Patients were divided into responders and non-responders/relapsers based on treatment response. Non-parametric tests were used for inter-group comparisons at baseline and during follow-up time points. Generalised Estimating Equation was used to study association between changes in serial MRP8/14 levels and disease activity. At baseline, median MRP8/14 levels were higher in patients with TA than healthy	**INT**	**JUL TO DEC**	**CLINICAL IMMUNOLOGY AND RHEUMATOLOGY, BIOSTATISTICS, CARDIOLOGY**	**PMID:**29196802 **Impact Factor:** 1.824 **H-Index:**58

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	controls [7353 (4524 to11283) vs 4896 (3194 to 8474.5) ng/ml, p = 0.011]. Patients with active disease had higher levels [8552 (5463-12488)] than stable disease [5292.5 (3140.5-7310)], p = 0.002, and healthy controls [4896 (3194-8474.5)], p = 0.001. Changes in serial MRP8/14 level were associated with changes in disease activity, independent of steroid dose, p = 0.000. At R1, MRP 8/14 levels were lower than baseline in responders (n = 38) [9146.0 (6296.8-13693.8) vs 6501 (4314.8-8304.5), p = 0.004], but did not change in non-responders/relapsers (n = 14) [6693.5(4210.8-10516.3) vs 7755.0(5342-10741.0), p = 0.42]. Similar trend was observed at R2. MRP8/14 levels increased during follow-up in 66% and 26.3% of angiographic progressors and non-progressors, respectively. MRP8/14 in TA may act as a novel biomarker with prognostic implications.				
208.	Gojer, A., Gopalakrishnan, R. and Kuruvilla, A. Coping and spirituality among caregivers of patients with schizophrenia: a descriptive study from South India International Journal of Culture and Mental Health; 2017, 1-11 **Address:** Department of Psychiatry, **Christian Medical College, Vellore,** India In many parts of the world family members are the primary caretakers of persons with mental illness. The chronic stress associated with being a caregiver for an individual with schizophrenia can result in a variety of emotional responses, influenced by religion, spirituality and different styles of coping. The aim of this study was to assess patterns of coping, and spiritual and religious beliefs among caregivers of patients with schizophrenia. Consecutive patients with schizophrenia and their caregivers attending an outpatient clinic were recruited. Patients were rated on the Positive and Negative Symptom Scale. The Royal Free Interview for Religious and Spiritual Beliefs, Modified Jalowiec Coping Scale and General Health Questionnaire-12 were administered to caregivers. Socio-demographic details of carers and clinical details of patients were recorded. Caregivers of patients with schizophrenia were found to cope in a variety of ways; the most useful and frequently used was the optimistic style of coping. While religious beliefs had an influence, factors significantly associated with coping included caregiver education and employment and patient psychopathology. Providing support to carers of patients with schizophrenia and enhancing their coping is an essential part of quality clinical care. Spirituality and religion can serve as a positive coping	**INT**	**JUL TO DEC**	**PSYCHIATRY**	**NO PMID** **NO PMCID** **SCOPUS** **Impact Factor:**0.250 **H-Index:**7

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	strategy. © 2017 Informa UK Limited, trading as Taylor & Francis Group				
209.	Gorka, R., Gohil, A. J., Gupta, A. K. and Koshy, S. Treatment Outcomes for Isolated Maxillary Complex Fractures with Maxillomandibular Screws Craniomaxillofac Trauma Reconstr; 2017, 10 (4): 278-280 **Address:** Department of Plastic, Burns, Reconstructive and Microvascular Surgery, **Christian Medical College and Hospital** Vellore, Vellore, Tamil Nadu, India. Department of Dental Surgery, **Christian Medical College and Hospital** Vellore, Vellore, Tamil Nadu, India. Intermaxillary fixation (IMF) is a basic and fundamental principle in the management of patients with fractures of the maxillomandibular complex. There are several shortcomings related to the conventionally recommended tooth-mounted devices that are used to achieve IMF. To circumvent these, the use of bone-borne screws has been advocated. We present a series of maxillary fractures treated with IMF screws. Over a 12-month period, 15 cases of maxillary fracture were managed with open reduction and bone plate fixation. IMF screws were used to achieve IMF intraoperatively and for a short duration postoperatively. Eight cortical titanium screws were inserted transmucosally, two for each quadrant at the junction of the attached and mobile mucosa. Satisfactory occlusion was achieved in all the patients with few complications. IMF screw fixation was observed to be a safe and quick method for open reduction of maxillary fractures. Tooth-borne devices are associated with problems such as poor oral hygiene and periodontal health, extrusion of teeth, loss of tooth vitality, traumatic ulcers of buccal and labial mucosa, and needle stick injury to the operator. These procedures are also time consuming. The use of cortical bone screws is a quicker and safe alternative for achieving satisfactory IMF.	**INT**	**JUL TO DEC**	**PLASTIC SURGERY, DENTAL SURGERY**	**PMID:**29109838 **PMCID:**5669979 **Impact Factor:**0.530 **H-Index:**5
210.	Gorka, Rahul, Gupta, Ashish Kumar, Prakash, Suriya, Bakthavachel, Immanuel, Lamba, Shashank and Gohil, Amish Jayantilal Simple, self-adjustable airplane splint for axillary contractures Burns Open; 2017, 1 (2): 54-58 http://dx.doi.org/10.1016/j.burnso.2017.07.001 **Address:** a Department of Burns, Plastic and Reconstructive Surgery, Christian Medical College Vellore, Tamilnadu 632004, India b Prosthetic and Orthotic Services, Department of Physical Medicine and	**INT**	**JAN TO JUN**	**PLASTIC SURGERY UNIT-II**	**Impact Factor: 1.950**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Rehabilitation, Christian Medical College Vellore, Tamilnadu 632004, India Introduction Axillary burns and contractures are physically debilitating. Early splintage and patient compliance is critical to improve functional outcomes. Traditional treatment of axillary contractures involved use of airplane splints which provided fixed abduction at the shoulder joint. These splints pose physical, social and environmental restrictions for the patient in crowded and narrow spaces like washrooms, buses and other means of local transport. Aims and objectives The wearability and compliance of static airplane splints were found to be surprisingly low in such patients. Hence, to overcome these problems, we designed a modified self-adjustable airplane splint. Material and methods The abduction support and locking mechanism with adjustable hook were fabricated using simple hardware (a cabin hook and eye arrangement-the one used commonly in windows and doors). Results and conclusion A modification to the design of a pre-existing airplane splint has been attempted. Easy and quick manoeuvrability of the splint locking-unlocking mechanism by the user himself, along with the added advantage of possible use even in narrow crowded spaces, potentially enhances the patients' ability to mobilize in the community and makes it more user-friendly.				
211.	Gouse, M., Jayasankar, V., Patole, S., Veeraraghavan, B. and Nithyananth, M. Clinical Outcomes in Musculoskeletal Involvement of Burkholderia Pseudomallei Infection Clin Orthop Surg; 2017, 9 (3): 386-391 **Address:** Department of Orthopaedics, **Christian Medical College and Hospital, Vellore**, India. Department of Orthopaedics, Sundaram Medical Foundation, Chennai, India. Department of Infectious Disease, **Christian Medical College and Hospital, Vellore**, India. Department of Microbiology, **Christian Medical College and Hospital, Vellore**, India. BACKGROUND: Musculoskeletal involvement in melioidosis is often seen in conjunction with a disseminated illness. Recent reports suggest that operative management of musculoskeletal melioidosis has favourable results. The purpose of this study was to review the patient profile and clinical outcomes of Burkholderia pseudomallei infection in the musculoskeletal system. METHODS: Hospital records of 163 patients who were diagnosed to have B. pseudomallei infection between	**INT**	**JUL TO DEC**	**ORTHOPAEDICS, INFECTIOUS DISEASES, CLINICAL MICROBIOLOGY**	**PMID:**28861207 **PMCID:**5567035 KJD:ART002256511 **Impact Factor:**1.460 **H-Index:**21

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	January 2009 and December 2014 were reviewed. Patients underwent surgical and nonsurgical management depending upon the tissue of involvement. Epidata software was used to record the data. The SPSS ver. 17.0 was used for analysis. RESULTS: Eighteen out of 24 patients who had musculoskeletal melioidosis were available for follow-up. Septic arthritis, osteomyelitis, and intramuscular abscess were the common diagnosis, with 6 patients in each group. Twelve patients required surgical intervention. All patients received a full course of parenteral ceftazidime followed by oral doxycycline and co-trimoxazole. Two out of 6 patients (33.3%) died among those who had nonsurgical management as compared to none in the group who had surgical management. This was significant at 10% level of significance (p = 0.098). The rest were followed up for a minimum of 1 year with no evidence of disease recurrence. CONCLUSIONS: This series describing musculoskeletal involvement in melioidosis is the largest such study from a recently recognized 'endemic' region. Of importance are the patterns of musculoskeletal involvement, pitfalls in diagnosis and adequate clinical response with timely diagnosis and appropriate surgical management.				
212.	Graham R.D. Jones*, Stephanie Albarede, Dagmar Kesseler, Finlay MacKenzie, Joy Mammen, Morten Pedersen, Anne Stavelin, Marc Thelen, Annette Thomas, Patrick J. Twomey, Emma Ventura and Mauro Panteghini, for the EFLM Task Finish Group – Analytical Performance Specifications for EQAS (TFG-APSEQA) Analytical performance specifications for external quality assessment – definitions and descriptions Clinical Chemistry and Laboratory Medicine; 2017, 55 (7): 949-955 ***Corresponding author:** Graham R.D. Jones, Department of Chemical Pathology, St Vincent's Hospital, Sydney – SydPath, Victoria St, Darlinghurst 2010, Australia, Phone: +61 2 83829160, E-mail: Graham.Jones@svha.org.au; University of NSW, Sydney, Australia; and RCPAQAP, Sydney, Australia Stephanie Albarede: Centre Toulousain pour le Contrôle de qualité en Biologie clinique (CTCB), Toulouse, France Dagmar Kesseler: Quality Control Centre Switzerland (CSCQ), Geneva, Switzerland Finlay MacKenzie: Birmingham Quality, UK NEQAS, University Hospitals Birmingham NHS Trust, Birmingham, UK Joy Mammen: Department of Transfusion Medicine, **Christian Medical College vellore**, Vellore, Tamilnadu, India Morten Pedersen: Danish Institute for External Quality Assurance in Laboratory Medicine (DEKS), Copenhagen University Hospital, Glostrup, Denmark	**INT**	**JUL TO DEC**	**TRANSFUSION MEDICINE**	**PMID:**28593915 **WOS:**000403075100015 **Impact Factor:**3.432 **H-Index:**84

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Abstract: External Quality Assurance (EQA) is vital to ensure acceptable analytical quality in medical laboratories. A key component of an EQA scheme is an analytical performance specification (APS) for each measurand that a laboratory can use to assess the extent of deviation of the obtained results from the target value. A consensus conference held in Milan in 2014 has proposed three models to set APS and these can be applied to setting APS for EQA. A goal arising from this conference is the harmonisation of EQA APS between different schemes to deliver consistent quality messages to laboratories irrespective of location and the choice of EQA provider. At this time there are wide differences in the APS used in different EQA schemes for the same measurands. Contributing factors to this variation are that the APS in different schemes are established using different criteria, applied to different types of data (e.g. single data points, multiple data points), used for different goals (e.g. improvement of analytical quality; licensing), and with the aim of eliciting different responses from participants. This paper provides recommendations from the European Federation of Laboratory Medicine (EFLM) Task and Finish Group on Performance Specifications for External Quality Assurance Schemes (TFG-APSEQA) and on clear terminology for EQA APS. The recommended terminology covers six elements required to understand APS: 1) a statement on the EQA material matrix and its commutability; 2) the method used to assign the target value; 3) the data set to which APS are applied; 4) the applicable analytical property being assessed (i.e. total error, bias, imprecision, uncertainty); 5) the rationale for the selection of the APS; and 6) the type of the Milan model(s) used to set the APS. The terminology is required for EQA participants and other interested parties to understand the meaning of meeting or not meeting APS. **Keywords:** analytical performance specifications; external quality assurance; international harmonisation; proficiency testing DOI: 10.1515/cclm-2017-0151				
213.	Gupta, A. and Rajshekhar, V. Fatty filum terminale (FFT) as a secondary tethering element in children with closed spinal dysraphism Childs Nerv Syst; 2017, **Address:** Department of Neurological Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Neurological Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. rajshekhar@cmcvellore.ac.in. PURPOSE: The purpose of this study was to assess the prevalence of FFT as an	**INT**	**JUL TO DEC**	**NEUROLOGICAL SCIENCES**	**PMID:**29260294 **Impact Factor:**1.081 **H-Index:**69

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	additional tethering element in children operated for closed spinal dysraphism, where FFT was not the primary tethering pathology. METHODS: This is a retrospective study of 195 children (< 18 years of age) who underwent surgery for closed spinal dysraphism and did not have FFT as the primary diagnosis. All patients were operated during the period 2005-2017 by a single surgeon. The commonest diagnosis was a lipomyelomeningocele (LMMC, n = 81, 41.5%), followed by split cord malformations (SCM, types I and II, n = 61, 31.3%), dermal sinus (n = 28, 14.4%), and dermoid cyst (n = 10, 5.1%). Factors such as age and sex, presenting symptoms, intraoperative findings, and radiological presence of a FFT on a magnetic resonance imaging (MRI) were documented, and the relationship between the primary diagnoses and presence of FFT was analyzed. RESULTS: FFT as a secondary finding was seen in 63 patients (32.3%). The mean age of the cohort was 54 months (4.5 years) and the sex distribution was relatively even (51.8% girls). The commonest symptom at presentation was a swelling in the back, followed by lower limb weakness. The mean duration of symptoms was nearly 30 months. FFT was seen on the MRI and confirmed intraoperatively in 55 patients (28.2%). There were 8 patients (4.1%) where a FFT was seen intraoperatively, but was not diagnosed on the preoperative MRI. In 16 patients, FFT was seen > 2 segments away from the primary tethering pathology, 8 of which mandated a second skin incision for sectioning of the FFT. Secondary FFT was most commonly associated with a SCM (types I and II combined) and was seen in 42.6% of those patients. It was least commonly associated with intradural dermoid cysts. CONCLUSION: The presence of a secondary FFT should be considered and actively sought on preoperative thin-slice T1W axial MR images in the sacral region in all patients with spinal dysraphism. Even if a FFT is not seen on preoperative MR images, the filum should be explored and sectioned if it is in the vicinity of the primary surgical field, especially in patients with SCM.				
214.	Gupta, M., Gnanasekaran, K. K., Manojkumar, R., Thomas, A. and Sebastian, A. Extrauterine Placental Site Trophoblastic Tumor Involving the Vagina Int J Gynecol Pathol; 2017, 36 (3): 294-299 **Address:** Departments of General Pathology (M.G., K.K.G., R.M.)Gynecologic Oncology (A.T., A.S.), **Christian Medical College, Vellore,** Tamil Nadu, India. Very few cases of placental site trophoblastic tumor (PSTT) primarily involving extrauterine sites have been reported to date. We report a case of a 29-year-old	**INT**	**JUL TO DEC**	**GENERAL PATHOLOGY, NEUROLOGICAL SCIENCES**	**PMID:**27513078 **Impact Factor:** 1.512 **H-Index:**68

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	female who presented with a vaginal nodule 9 months after delivery at an outside hospital which was initially diagnosed as a poorly differentiated squamous cell carcinoma. Subsequently she was referred to our institute, and on the basis of histology, mildly elevated serum beta-HCG level, and immunohistochemistry, PSTT was diagnosed. After the completion of chemotherapy, the vaginal nodule completely regressed and serum beta-hCG returned to baseline. Her follow-up has been unremarkable. This case highlights the importance of the fact that PSTT can be easily misdiagnosed at extrauterine sites in the absence of proper clinical, histologic, and immunohistochemical correlation.				
215.	Gupta, M., Roy, S., Wann, C. and Eapen, A. Giant fibroepithelial polyp of the ureter BMJ Case Rep; 2017, **Address:** Department of General Pathology, **Christian Medical College, Vellore,** India gupta.mayank103@gmail.com Department of General Pathology, **Christian Medical College, Vellore,** India. Department of Urology, **Christian Medical College, Vellore,** India. Department of Radiodiagnosis and Imaging, **Christian Medical College, Vellore,** India. Giant fibroepithelial polyp is a rare cause of ureteric/ureteropelvic junction (UPJ) obstruction. We report a rare case of giant fibroepithelial polyp in a 32-year-old woman involving the whole length of the ureter, reaching up to the UPJ which was clinically and radiologically considered to be urothelial carcinoma. Frozen section showed a polypoid lesion lined by urothelium with no evidence of dysplasia or malignancy. Subsequently, nephroureterectomy was done as there was marked renal hydronephrosis and it was impossible to separate the polyp from the wall of the ureter. Histopathological examination and immunohistochemistry confirmed the diagnosis of giant fibroepithelial polyp, ruling out malignancy.	**INT**	**JAN TO JUN**	**GENERAL PATHOLOGY, UROLOGY, RADIOLOGY**	**PMID:**28389594 **Impact Factor:**NA **H-Index:**11
216.	Gupta, M., Suryawanshi, M., Kumar, R. and Peedicayil, A. Angioleiomyoma of Uterus: A Clinicopathologic Study of 6 Cases Int J Surg Pathol; 2018, 26 (1): 18-23 **Address:** 1 **Christian Medical College, Vellore,** Tamil Nadu, India.	**INT**	**JUL TO DEC**	**OBSTETRICS AND GYNECOLOGY UNIT I**	**PMID:**28905674 **Impact Factor:** 0.830 **H-Index:**42

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	BACKGROUND AND OBJECTIVES: Angioleiomyoma is a benign perivascular neoplasm commonly involving subcutaneous tissue of extremities, head, and trunk region. They rarely involve the female genital tract. This study analyses clinicopathological features of 6 cases of uterine angioleiomyoma. METHODS: Routine sections of 6 cases were reviewed and immunohistochemical markers namely muscle-specific actin, h-caldesmon, desmin, CD10, WT-1, HMB-45, and melan-A were done. RESULTS: Of the 6 cases, 4 cases had tumor involving the corpus and 2 cases had tumor in the cervix. Grossly, all tumors had a whorled and congested cut surface. Microscopic examination of all the cases revealed circumscribed neoplasms composed of interlacing fascicles of benign perivascular smooth muscle cells with evenly distributed slit-like blood vessels (solid variant) along with vessels exhibiting thick muscular walls with swirling pattern (venous variant). In only 2 cases many dilated vessels were seen (cavernous variant). Immunohistochemically, all cases were positive for muscle-specific actin, h-caldesmon, and desmin. All cases were negative for CD10 and WT-1 ruling out endometrial stromal tumor and were negative for HMB-45 and melan-A ruling out perivascular epithelioid cell tumor (both endometrial stromal tumor and perivascular epithelioid cell tumor have prominent vessels but have different histomorphology). In all cases, surgical excision was curative and there were no intraoperative or postoperative complications. Follow-up of all the cases has been unremarkable. CONCLUSION: As the World Health Organization has not included angioleiomyoma in the classification of mesenchymal tumors of uterine corpus and cervix, we recommend that it should be included in the classification.				
217.	Gupta, N., Doss, J. Kabeer, Mohan, H., Goel, R. and Danda, D. MYCOBACTERIAL CORD FACTOR ANALOG INDUCES HIGH IL-6 SECRETION AND MINCLE RECEPTOR EXPRESSION IN PATIENTS WITH TAKAYASU ARTERITIS Annals of the Rheumatic Diseases; 2017, 76 328-328	**INT**	**JUL TO DEC**	**CLINICAL IMMUNOLOGY AND RHEUMATOLOGY, BIOSTATISTICS**	**NO PMID** **WOS:**000413181401013 **Impact Factor:**12.811 **H-Index:**189
218.	Gupta, N., Ganpati, A., Mandal, S., Mathew, J., Goel, R., Mathew, A. J., Nair, A., Ramasamy, P. and Danda, D. Mycophenolate mofetil and deflazacort combination in neuropsychiatric lupus: a decade of experience from a tertiary care teaching hospital in southern India Clin Rheumatol; 2017, 36 (10): 2273-2279	**INT**	**JUL TO DEC**	**RHEUMATOLOGY**	**PMID:**28785855 **Impact Factor:**2.365 **H-Index:**68

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Department of Clinical Immunology and Rheumatology, **Christian Medical College**& Hospital, Vellore, Tamil Nadu, India. Department of Biostatistics, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Clinical Immunology and Rheumatology, **Christian Medical College**& Hospital, Vellore, Tamil Nadu, India. debashisdandacmc@hotmail.com. Mycophenolate mofetil (MMF) is an effective therapeutic agent with high safety profile in the management of lupus nephritis. This retrospective study was conducted to assess the efficacy and side effect profile of MMF as induction as well as maintenance therapeutic agent along with tapering steroids in neuropsychiatric lupus (NPSLE). Hospital electronic medical records of patients with SLE diagnosed by ACR 1990 and/or SLICC 2012 criteria between January 2005 and May 2015 were retrieved. Among them, patients fulfilling ACR 1999 criteria for NPSLE were identified. Data of NPSLE patients treated with MMF as upfront second line immunosuppressive agent, both for induction and maintenance, were analyzed. Of the 140 patients with NPSLE, 88 fulfilled the inclusion criteria. Mean age of the cohort was 25.51 +/- 7.82 years with female to male ratio of 84:4. Median duration of follow-up was 33 months (3-129 months). Seizure was the most common NPSLE manifestation (n = 37, 42.05%). Of the 88 patients, 18 had NPSLE solely due to secondary antiphospholipid syndrome. Of the remaining 70 patients, 61 (87.1%) had improved, 7 remained unchanged with no worsening and 3 patients had worsening or developed new symptoms during follow up after 3 months from baseline. At last follow-up, 55 out of 57 patients (97.1%) with detailed data had improved, while 2 patients had relapsed. Side effects were significantly more common in patients on prednisolone as compared to those on deflazacort. In patients with NPSLE, MMF along with tapering steroids is an efficacious combo in inducing remission and preventing relapse of disease.				
219.	Gupta, N., Mathew, J., Mohan, H., Chowdhury, S. D., Kurien, R. T., Christopher, D. J., Thangakunam, B., Alexander, M., Sivadasan, A., Tamilarasi, V., Valson, A. T., Gowri, M., Kabeerdoss, J. and Danda, D. Addition of second-line steroid sparing immunosuppressants like mycophenolate mofetil improves outcome of Immunoglobulin G4-related disease (IgG4-RD): a series from a tertiary care teaching hospital in South India	**INT**	**JAN TO JUN**	**RHEUMATOLOGY, GASTROINTESTINAL SCIENCE, PULMONARY MEDICINE, NEUROLOGY,**	**PMID:**28550399 **Impact Factor:** 1.824 **H-Index:**58

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Rheumatol Int; 2017, **Address:** Department of Clinical Immunology & Rheumatology, **Christian Medical College, Vellore,** India. Department of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India. Department of Pulmonary Medicine, **Christian Medical College, Vellore,** India. Department of Neurology, **Christian Medical College, Vellore,** India. Department of Nephrology, **Christian Medical College, Vellore,** India. Department of Biostatistics, **Christian Medical College, Vellore,** India. Department of Clinical Immunology & Rheumatology, **Christian Medical College, Vellore,** India. debashisdandacmc@hotmail.com IgG4-related disease (IgG4-RD) is a systemic fibro-inflammatory disease. This disease may be associated with elevated serum and tissue IgG4 levels. Early treatment prevents fibrosis and organ damage. We retrospectively studied the clinicopathologic correlation and outcome of treatment in IgG4-RD. This single-center retrospective study was done using electronic records of patients subjected to assay of serum IgG4 levels in our laboratory by nephelometry. There were 473 patients with suspected IgG4-RD. Of them, 41 patients fulfilled comprehensive diagnostic criteria for IgG4-RD and 432 had diseases other than IgG4-RD. Clinical and histopathological data including tissue IgG4/IgG ratio, other relevant laboratory findings as well as management data of 41 patients with IgG4-RD were analyzed. There were 29 males and 12 females with mean age of 44.1 +/- 2.19 years. Thirteen patients had definite, 19 had probable and 9 had possible IgG4-RD. Male predominance, multiple organ involvement and IgG4 responder Index were significantly higher in definite IgG4-RD as compared to probable and possible IgG4-RD. Serum IgG4 level was elevated in 37 patients (90.2%). Glucocorticoids were used in 35 patients (85.4%) and second-line immunosuppressive agent in 23 patients (65.7%). Of the 21 patients on follow-up, 19 (90.7%) had clinical improvement at the first follow-up visit. Nine (90%) out of the ten patients who were assessed by IgG4 responder index, also had shown improved score with treatment. Patients with IgG4-RD in our series showed favorable responses to treatment with glucocorticoids and addition of steroid sparing immunosuppressive agents (mainly mycophenolate mofetil) helped successful tapering of steroids, while maintaining the improvement.			**NEPHROLOGY, BIOSTATISTICS**	
220.	Gupta, P. K., Krishna, M., Chullikana, A., Desai, S., Murugesan, R., Dutta, S., Sarkar, U., Raju, R., Dhar, A., Parakh, R., Jeyaseelan, L., Viswanathan, P., Vellotare, P. K., Seetharam, R. N., Thej, C., Rengasamy, M., Balasubramanian, S.	**INT**	**JAN TO JUN**	**BIOSTATISTICS**	**PMID:**28297569 **Impact Factor:** 4.000

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	and Majumdar, A. S. Administration of Adult Human Bone Marrow-Derived, Cultured, Pooled, Allogeneic Mesenchymal Stromal Cells in Critical Limb Ischemia Due to Buerger's Disease: Phase II Study Report Suggests Clinical Efficacy Stem Cells Transl Med; 2017, 6 (3): 689-699 **Address:** Stempeutics Research, Bangalore, India. Department of Vascular Surgery, Sri Jayadeva Institute of Cardiovascular Sciences, Bangalore, India. Department of Vascular Surgery, MS Ramaiah Medical College & Hospitals, Bangalore, India. Department of Vascular Surgery, SRM Medical College, Chennai, India. Department of Cardiovascular Surgery, Nightingale Hospital, Kolkata, India. Department of Cardiovascular Surgery, Health Point Hospital, Kolkata, India. Department of Vascular Surgery, Sri Ramachandra Medical College, Chennai, India. Department of Surgical Disciplines, All India Institute of Medical Sciences, New Delhi, India. Division of Peripheral Vascular and Endovascular Sciences, Medanta-The Medicity, Gurgaon, Haryana, India. Department of Biostatistics, **Christian Medical College, Vellore,** India. Manipal University, Manipal, India. Critical limb ischemia (CLI) due to Buerger's disease is a major unmet medical need with a high incidence of morbidity. This phase II, prospective, nonrandomized, open-label, multicentric, dose-ranging study was conducted to assess the efficacy and safety of i.m. injection of adult human bone marrow-derived, cultured, pooled, allogeneic mesenchymal stromal cells (BMMSC) in CLI due to Buerger's disease. Patients were allocated to three groups: 1 and 2 million cells/kg body weight (36 patients each) and standard of care (SOC) (18 patients). BMMSCs were administered as 40-60 injections in the calf muscle and locally, around the ulcer. Most patients were young (age range, 38-42 years) and ex-smokers, and all patients had at least one ulcer. Both the primary endpoints-reduction in rest pain (0.3 units per month [SE, 0.13]) and healing of ulcers (11% decrease in size per month [SE, 0.05])-were significantly better in the group receiving 2 million cells/kg body weight than in the SOC arm. Improvement in secondary endpoints, such as ankle brachial pressure index (0.03 [SE, 0.01] unit increase per month) and total walking distance (1.03 [SE, 0.02] times higher per month), were also significant in the group receiving 2 million cells/kg as compared with the SOC arm. Adverse events reported were remotely related or unrelated to				**H-Index:**39

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	BMMSCs. In conclusion, i.m. administration of BMMSC at a dose of 2 million cells/kg showed clinical benefit and may be the best regimen in patients with CLI due to Buerger's disease. However, further randomized controlled trials are required to confirm the most appropriate dose. Stem Cells Translational Medicine 2017;6:689-699.				
221.	Gupta, R. D., Ramachandran, R., Gangadhara, P., Anoop, S., Singh, S. H., Satyaraddi, A., Sathyakumar, S., Asha, H. S. and Thomas, N. Clinical characteristics, beta-cell dysfunction and treatment outcomes in patients with A-beta+ Ketosis-Prone Diabetes (KPD): The first identified cohort amongst Asian Indians J Diabetes Complications; 2017, 31 (9): 1401-1407 **Address:** Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College** (CMC), Vellore, India. Electronic address: riddhi_dg@cmcvellore.ac.in. Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College** (CMC), Vellore, India. Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College** (CMC), Vellore, India. Electronic address: hsksingh@cmcvellore.ac.in. Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College** (CMC), Vellore, India. Electronic address: nihal_thomas@cmcvellore.ac.in. OBJECTIVE: Ketosis-prone diabetes (KPD), an atypical form of diabetes, has emerged as a heterogeneous syndrome in multiple ethnic groups. The objectives of this study were to look into the clinical characteristics of adult Asian Indian patients with recently diagnosed, antibody negative diabetes presenting with unprovoked ketoacidosis (A-beta+ KPD) and to determine the natural course of recovery of beta-cell functions on serial follow-up over one year. RESEARCH DESIGN AND METHODS: Newly diagnosed adult diabetes patients (n=11) with suspected KPD (A-beta+) were prospectively studied over a period of 1-year with serial evaluations of clinical, biochemical and beta-cell secretion characteristics. These were compared with a control group (n=23) of KPD (A+beta-) (classical Type 1A diabetes) with similar presentation. Beta-cell secretion was assessed by fasting and stimulated C-peptide values after a standard mixed meal challenge. Glycaemic control and treatment outcomes were also documented. RESULTS: In comparison to the A+beta- KPD controls, the A-beta+ KPD patients had a significantly older age, higher BMI, stronger family history of type 2 diabetes, more severe	**INT**	**JUL TO DEC**	**ENDOCRINOLOGY**	**PMID:**28668376 **Impact Factor:** 2.734 **H-Index:**70

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	ketoacidosis and higher fasting and stimulated C-peptide level at presentation. On serial follow-up, the patients with KPD achieved complete recovery of their beta-cell function with remission from insulin-dependence within 3-4months without further recurrences of DKA. CONCLUSIONS: This is the first reported series of A-beta+ KPD from India. The phenotype of Indian A-beta+ KPD patients differs from their Western counterparts in that they are relatively younger and leaner, though the male preponderance and natural history of recovery of beta-cell dysfunction bears similarity.				
222.	Gupta, R. D., Ramachandran, R., Venkatesan, P., Anoop, S., Joseph, M. and Thomas, N. Indirect Calorimetry: From Bench to Bedside Indian J Endocrinol Metab; 2017, 21 (4): 594-599 **Address:** Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Biochemistry, **Christian Medical College, Vellore,** Tamil Nadu, India. Accurate determination of energy expenditure (EE) is vitally important yet often neglected in clinical practice. Indirect calorimetry (IC) provides one of the most sensitive, accurate, and noninvasive measurements of EE in an individual. Over the last couple of decades, this technique has been applied to clinical circumstances such as acute illness and parenteral nutrition. Beyond assessing the nutritional needs, it has also shed light on various aspects of nutrient assimilation, thermogenesis, the energetics of physical exercise, and the pathogenesis of obesity and diabetes. However, because of little or no experience with IC provided during medical education, the benefits of IC are poorly appreciated. Newer technology, cost-effectiveness, and a better understanding of how to interpret measurements should lead to more frequent use of IC. This review focuses on the physicochemical background of IC, the various indications for use, techniques and instruments, potential pitfalls in measurement, and the recent advances in technology that has adapted the technique to long-term studies in humans.	**NAT**	**JUL TO DEC**	**ENDOCRINOLOGY, BIOCHEMISTRY**	**PMID:**28670546 **PMCID:**5477450 **Impact Factor:** NA **H-Index:**7
223.	Gupta, S. and Gupta, N. Sjogren Syndrome and Pregnancy: A Literature Review	**INT**	**JAN TO JUN**	**CLINICAL IMMUNOLOGY AND RHEUMATOLO**	**PMID:**28080954 **Impact Factor:**1.340 **H-Index:**14

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Perm J; 2017, 21 **Address:** Medical Officer in the Department of Obstetrics and Gynecology at the Vardhman Mahavir Medical College and Safdarjung Hospital in Delhi, New Delhi, India. drsuruchi87@gmail.com. Fellow in Clinical Immunology & Rheumatology at the **Christian Medical College** in Vellore, India. nik.gupta4u@gmail.com ☐**OBJECTIVES:** Autoimmune diseases do not impair fertility, and women with autoimmune diseases who become pregnant are likely to experience more complicated pregnancies than are women without the disease. Pregnancies complicated by these disorders have a high clinical impact on both the pregnancy and the disease. The effect of autoimmune disease on pregnancy differs according to the type of maternal disease, disease activity, severity of organ damage, antibody profile, and drug treatment. Sjogren syndrome is an autoimmune disease with a high prevalence of anti-SS-A (anti-Ro) and anti-SS-B (anti-La) antibodies. Anti-SS-A antibodies are associated with congenital heart block. Data on pregnancy outcomes in primary Sjogren syndrome are scarce. **METHODS:** We performed a review of the literature regarding pregnancy outcomes in women with Sjogren syndrome. **RESULTS:** Women with Sjogren syndrome are likely to experience more complications during pregnancy than women without an autoimmune disease. Studies show a high incidence of poor fetal outcomes for these patients. **CONCLUSION:** Women with Sjogren syndrome require prenatal counseling explaining the risks involved and the need to control the disease well before conception. High-risk pregnancies can be optimally managed by a multidisciplinary team.			**GY**	
224.	Gupta, S., Gupta, N., Singhal, S. and Nair, N. Carcinoma Cervix Presenting as Ischaemic Stroke in Young Female: A Case Report and Review of Literature J Clin Diagn Res; 2017, 11 (4): QD01-QD02 **Address:** Senior Resident, Department of Gynaecology, Safdarjung Hospital, Delhi, India. Fellow, Department of Clinical Immunology and Rheumatology, **CMC, Vellore,** Tamil Nadu, India. Senior Resident, Department of Pathology, BJ Medical College, Ahemdabad, Gujarat, India. Senior Resident, Department of Radio-Diagnosis, AIIMS, Delhi, India.	**INT**	**JAN TO JUN**	**CLINICAL IMMUNOLOGY AND RHEUMATOLOGY**	**PMID:**28571215 **Impact Factor:**0.650 **H-Index:**18

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Stroke is a disabling disease which increases the burden of already suffering cancer patients. Several mechanisms of stroke exist in cancer patients which includes - metastatic or non-metastatic such as coagulation disorders, infections or therapy related. Increased risk of ischaemic stroke has been validated for several cancers. However, there is scarce literature reported in carcinoma cervix patients. Review of literature suggests that stroke occurs more frequently in cancer patients than in the average population. We report an unusual case of a patient who presented with stroke but was later diagnosed as a case of carcinoma cervix.				
225.	Gupta, T., Sarkar, C., Rajshekhar, V., Chatterjee, S., Shirsat, N., Muzumdar, D., Pungavkar, S., Chinnaswamy, G. and Jalali, R. Indian Society of Neuro-Oncology consensus guidelines for the contemporary management of medulloblastoma Neurol India; 2017, 65 (2): 315-332 **Address:** Neuro-Oncology Disease Management Group, Tata Memorial Centre, Mumbai, Maharashtra, India. Division of Neuro-pathology, All India Institute of Medical Sciences, New Delhi, India. Department of Neuro-surgery, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Neuro-surgery, Park Clinic, Kolkata, West Bengal, India. Department of Neuro-surgery, King Edward Memorial Hospital, Mumbai, Maharashtra, India. Division of Radio-diagnosis and Imaging, Global Hospital, Mumbai, Maharashtra, India. **INTRODUCTION:** The high success rate in the management medulloblastoma achieved in the western world is not exactly mirrored in developing countries including India. Socio-demographic differences, health-care disparity, and lack in uniformity of care with resultant widespread variations in the clinical practice are some of the reasons that may partly explain this difference in outcomes. Patients with medulloblastoma require a multi-disciplinary team approach involving but not limited to neuro-radiology, neurosurgery; neuropathology, molecular biology, radiation oncology, pediatric medical oncology and rehabilitative services for optimizing outcomes. **METHODS:** The Indian Society of Neuro-Oncology (ISNO) constituted an expert multi-disciplinary panel with adequate representation from all stakeholders to prepare national consensus guidelines for the contemporary management of medulloblastoma. **RESULTS:** Minimum desirable, as well as	**NAT**	**JAN TO JUN**	**NEUROSURGERY II**	**PMID:**28290395 **Impact Factor:** 1.758 **H-Index:**39

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	preferable though optional recommendations (as appropriate), were developed and adopted for the pre-surgical work-up including neuroimaging; neurosurgical management including surgical principles, techniques, and complications; neuropathology reporting and molecular testing; contemporary risk-stratification in the molecular era; appropriate adjuvant therapy (radiotherapy and chemotherapy); and follow-up schedule in medulloblastoma. **CONCLUSIONS:** The current document represents a broad consensus reached amongst various stakeholders within the neuro-oncology community involved in the contemporary curative-intent management of children with medulloblastoma. It provides both general as well as specific guidelines and recommendations to be adopted by physicians and health care providers across India to achieve uniformity of care, improve disease-related outcomes, and compare results between institutions within the country.				
226.	Hansen, L. K., Schroder, H. D., Lund, L., Rajagopal, K., Maduri, V. and Sellathurai, J. The effect of low intensity shockwave treatment (Li-SWT) on human myoblasts and mouse skeletal muscle BMC Musculoskelet Disord; 2017, 18 (1): 557 **Address:** Department of Clinical Pathology, SDU Muscle Research Cluster (SMRC), Odense University Hospital, Odense, Denmark. Institute of Clinical Research, Faculty of Health Science, University of Southern Denmark, Odense, Denmark. Department of Urology, Odense University Hospital, Odense, Denmark. Paediatric Orthopaedic Unit and Center for Stem Cell Research, **Christian Medical Centre, Vellore,** India. Department of Clinical Pathology, SDU Muscle Research Cluster (SMRC), Odense University Hospital, Odense, Denmark. jsellathurai@health.sdu.dk. Institute of Clinical Research, Faculty of Health Science, University of Southern Denmark, Odense, Denmark. jsellathurai@health.sdu.dk. BACKGROUND: Transplanting myogenic cells and scaffolds for tissue engineering in skeletal muscle have shown inconsistent results. One of the limiting factors is neovascularization at the recipient site. Low intensity shockwave therapy (Li-SWT) has been linked to increased tissue regeneration and vascularization, both integral to survival and integration of transplanted cells. This study was conducted to demonstrate the response of myoblasts and skeletal muscle to Li-SWT. METHOD:	**INT**	**JUL TO DEC**	**PAEDIATRIC ORTHOPEDICS, CENTRE FOR STEM CELL RESEARCH**	**PMID:**29284454 **Impact Factor:**1.739 **H-Index:**68

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Primary isolated human myoblasts and explants were treated with low intensity shockwaves and subsequently cell viability, proliferation and differentiation were tested. Cardiotoxin induced injury was created in tibialis anterior muscles of 28 mice, and two days later, the lesions were treated with 500 impulses of Li-SWT on one of the legs. The treatment was repeated every third day of the period and ended on day 14 after cardiotoxin injection.. The animals were followed up and documented up to 21 days after cardiotoxin injury. RESULTS: Li-SWT had no significant effect on cell death, proliferation, differentiation and migration, the explants however showed decreased adhesion. In the animal experiments, qPCR studies revealed a significantly increased expression of apoptotic, angiogenic and myogenic genes; expression of Bax, Bcl2, Casp3, eNOS, Pax7, Myf5 and Met was increased in the early phase of regeneration in the Li-SWT treated hind limbs. Furthermore, a late accumulative angiogenic effect was demonstrated in the Li-SWT treated limbs by a significantly increased expression of Angpt1, eNOS, iNOS, Vegfa, and Pecam1. CONCLUSION: Treatment was associated with an early upregulation in expression of selected apoptotic, pro-inflammatory, angiogenic and satellite cell activating genes after muscle injury. It also showed a late incremental effect on expression of pro-angiogenic genes. However, we found no changes in the number of PAX7 positive cells or blood vessel density in Li-SWT treated and control muscle. Furthermore, Li-SWT in the selected doses did not decrease survival, proliferation or differentiation of myoblasts in vitro.				
227.	Hashmi, S. K., Srivastava, A., Rasheed, W., Adil, S., Wu, T., Jagasia, M., Nassar, A., Hwang, W. Y. K., Hamidieh, A. A., Greinix, H. T., Pasquini, M. C., Apperley, J. F. and Aljurf, M. Cost and quality issues in establishing hematopoietic cell transplant program in developing countries Hematol Oncol Stem Cell Ther; 2017, 10 (4): 167-172 **Address:** Oncology Center, King Faisal Specialist Hospital and Research Center, Riyadh, Saudi Arabia; Department of Internal Medicine, Mayo Clinic, MN, USA. Electronic address: shashmi@kfshrc.edu.sa. Department of Hematology, **CMC, Vellore, India**. Oncology Center, King Faisal Specialist Hospital and Research Center, Riyadh, Saudi Arabia. Department of Oncology, Aga Khan University Hospital, Pakistan. Department of BMT, Hebei Yanda Lu Daopei Hospital, China. Department of Medicine, Vanderbilt University, TN, USA.	**INT**	**JUL TO DEC**	**HAEMATOLOGY**	**PMID:**28732192 **Impact Factor:**1.160 **H-Index:**13

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	National Research Center, Egypt. Duke-NUS Medical School, Singapore. Tehran University of Medical Sciences, Iran. Medical University of Graz, Austria. Medical College of Wisconsin, WI, USA. Hammersmith Hospital, Imperial College, UK. The hematopoietic cell transplant (HCT) activity has grown significantly over the past two decades in both developing and developed countries. Many challenges arise in establishing new HCT programs in developing countries, due to scarcity of resources and manpower in expertise in HCT. While cost issues can potentially hinder establishment of new HCT programs in certain regions, the focus on quality and value should be included in the general vision of leadership before establishing an HCT program. The main challenge in most developing countries is the lack of trained/qualified personnel, enormous start-up costs for a tertiary care center, and quality maintenance. Herein, we discuss the main challenges from a cost and quality perspective which occur at initiation of a new HCT program. We give real world examples of two developing countries that have recently started new HCT programs despite significant financial constraints. We also portray recommendations from the Worldwide Network of Blood and Marrow Transplantation for levels of requirements for a new HCT program. We hope that this review will serve as a general guide for new transplant program leadership with respect to the concerns of balancing high quality with concurrently lowering costs.				
228.	Henry, Jean Aishwarya, Muthu, Murugan S., Swaminathan, Kavitha and Kirubakaran, Richard Do Oral Health Educational Programmes for Expectant Mothers Prevent Early Childhood Caries? - A Systematic Review Oral Health & Preventive Dentistry; 2017, 15 (3): 215-221 Purpose: To summarise the evidence for the efficacy of oral health educational programmes provided to expectant mothers for preventing Early Childhood Caries (ECC) and to determine the most effective intervention programme. Materials and Methods: The search strategy included clinical trials in the Cochrane Oral Health Group's Trials Register, PubMed, Science Direct, Google Scholar, LILACS and	**INT**	**JUL TO DEC**	**ORAL AND DENTAL SURGERY**	**PMID:**28674702 **WOS:**000404631400003 **Impact Factor:** 0.657 **H-Index:**28

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	ClinicalKey (up to 26 August 2013) in English. Reference lists of identified randomised controlled trials (RCTs) and review articles were also hand searched. Studies were selected according to predefined inclusion and exclusion criteria. Results: The search identified 392 studies, only four of which were included. Risk ratios (RR) were calculated. The quality of the evidence was assessed by the GRADE approach. Results showed statistically significant decreases in caries incidence (RR = 0.18, 95% CI [from 0.06 to 0.52]) in one study. Meta-analysis could not be performed. Conclusion: Oral health educational programmes for expectant mothers may have a positive impact in preventing ECC, although the evidence is weak. **PMID:** DOI: 10.3290/j.ohpd.a38522				
229.	Hesarghatta Shyamasunder, A. and Abraham, P. Measuring TSH receptor antibody to influence treatment choices in Graves' disease Clin Endocrinol (Oxf); 2017, 86 (5): 652-657 **Address:** Department of Diabetes and Endocrinology, Aberdeen Royal Infirmary, Aberdeen, UK. TSH receptor antibody (TRAb) plays a key role in the pathogenesis of Graves' disease (GD), and its levels correlate with the clinical course. The second- and third-generation TRAb assays have >95% sensitivity and specificity for the diagnosis of GD and have improved the utility of TRAb to predict relapse. TRAb levels decline with antithyroid drug (ATD) therapy and after thyroidectomy. Its level increases for a year following radioactive iodine (RAI) therapy, with a gradual fall thereafter. TRAb level >12 IU/l at diagnosis of GD is associated with 60% risk of relapse at 2 years and 84% at 4 years. The prediction of risk of relapse improves further to >90% with TRAb >7.5 IU/l at 12 months or >3.85 IU/l at cessation of ATD therapy. TRAb tests are not expensive, and hence, TRAb measurements at presentation, after 12 months and/or 18 months (at cessation) of ATD therapy, could potentially guide treatment choices in GD. Elevated TRAb favours definitive treatment in the form of RAI or thyroidectomy, depending on the presence or absence of moderate-to-severe Graves' ophthalmopathy (GO) and the ability to comply with radiation protection requirements. Use of ATDs in early pregnancy is associated with increased risk of congenital anomalies; early ablative treatment (RAI/surgery) should be considered in women of childbearing age at higher risk of relapse of GD. TRAb >/=5 IU/l in pregnant women with current or previously treated GD is associated with increased risk of foetal and neonatal	**INT**	**JUL TO DEC**	**ENDOCRINOLOGY**	**PMID:**28295509

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	thyrotoxicosis, and hence needs close monitoring. TRAb levels parallel the course of GO, and elevated TRAb is an indication for steroid prophylaxis to prevent progression of GO with RAI therapy. doi: 10.1111/cen.13327.				
230.	Hiwale, Ankita A., Voshavar, Chandrashekhar, Dharmalingam, Priya, Dhayani, Ashish, Mukthavaram, Rajesh, Nadella, Rasajna, Sunnapu, Omprakash, Gandhi, Sivaraman, Naidu, V. G. M., Chaudhuri, Arabinda, Marepally, Srujan and Vemula, Praveen Kumar Scaling the effect of hydrophobic chain length on gene transfer properties of di-alkyl, di-hydroxy ethylammonium chloride based cationic amphiphiles Rsc Advances; 2017, 7 (41): 25398-25405 *Corresponding authors [a]Institute for Stem Cell Biology and Regenerative Medicine (inStem), GKVK-post, Bellary Road, Bengaluru 560065, India, **E-mail:** Praveenv@instem.res.in [b]BioSatva Technologies, Golnaka, Hyderabad 500013, India [c]Centre for Stem Cell Research, **Christian Medical College Campus, Bagayam, Vellore** 632002, India **E-mail:** Srujankm@cmcvellore.ac.in [d]Translational Neuro-oncology Laboratories, Moores Cancer Center, University of California San Diego, La Jolla, USA [e]National Institute for Pharmaceutical Education and Research, Balanagar, Hyderabad 500018, India [f]Biomaterials Group, CSIR-Indian Institute of Chemical Technology, Hyderabad 500 007, India The success of gene therapy critically depends on the availability of efficient transfection vectors. Cationic lipids are the most widely studied non-viral vectors. The molecular architecture of the cationic lipid determines its transfection efficiency. Variations in alkyl chain lengths of lipids influence self-assembly and liposomal fusion with the cell membrane. These factors determine the transfection ability of the lipid. Thus, to probe the effect of asymmetry in hydrophobic chains on transfection efficiency, we designed and synthesized a series of cationic lipids by systematically varying one of the two alkyl chains linked to the quaternary nitrogen centre from C18 to C10 and keeping the other alkyl C18 chain constant (Lip1818-Lip1810). Transfection studies in multiple cultured mammalian cells (CHO, B16F10 and HeLa) revealed that the lipids with C18:C14 and C18:C12 alkyl chains (Lip1814 & Lip1812) showed 20-30% higher transfection efficacies than their	**INT**	**JUL TO DEC**	**CENTRE FOR STEM CELL RESEARCH**	**NO PMID** **WOS:**000401535100024 **Impact Factor:** 3.108 **H-Index:**84

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	counterparts at 2 : 1 and 4 : 1 lipid to pDNA charge ratios. Cryo-transmission electron images showed unilamellar vesicle structures for the liposomes of lipids. Mechanistic studies involving Small Angle X-ray Scattering (SAXS) revealed that asymmetry in the hydrophobic region has a significant impact on liposomal fusion with the plasma membrane model. Collectively, these findings demonstrate that chain length asymmetry in the hydrophobic region of cationic lipids has an important role in their liposome-DNA interactions at optimal 2 : 1 and 4 : 1 lipid to pDNA charge ratios, which in turn modulates their gene transfer properties.				
231.	Hm, T. Thomas, Devakumar, D., Sasidharan, B., Bowen, S. R., Heck, D. K. and James Jebaseelan Samuel, E. Hybrid positron emission tomography segmentation of heterogeneous lung tumors using 3D Slicer: improved GrowCut algorithm with threshold initialization J Med Imaging (Bellingham); 2017, 4 (1): 011009 **Address:** VIT University, School of Advanced Sciences, Department of Physics, Vellore, Tamil Nadu 632004, India. **Christian Medical College,** Department of Nuclear Medicine, Vellore, Tamil Nadu 632004, India. **Christian Medical College,** Department of Radiation Oncology, Vellore, Tamil Nadu 632004, India. University of Washington, School of Medicine, Departments of Radiology and Radiation Oncology, Seattle, Washington 98195, United States. This paper presents an improved GrowCut (IGC), a positron emission tomography-based segmentation algorithm, and tests its clinical applicability. Contrary to the traditional method that requires the user to provide the initial seeds, the IGC algorithm starts with a threshold-based estimate of the tumor and a three-dimensional morphologically grown shell around the tumor as the foreground and background seeds, respectively. The repeatability of IGC from the same observer at multiple time points was compared with the traditional GrowCut algorithm. The algorithm was tested in 11 nonsmall cell lung cancer lesions and validated against the clinician-defined manual contour and compared against the clinically used 25% of the maximum standardized uptake value [SUV-(max)], 40% [Formula: see text], and adaptive threshold methods. The time to edit IGC-defined functional volume to arrive at the gross tumor volume (GTV) was compared with that of manual contouring. The repeatability of the IGC algorithm was very high compared	**INT**	**JAN TO JUN**	**NUCLEAR MEDICINE**	**PMID:**28149920 **Impact Factor:** NA **H-Index:** 1

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	with the traditional GrowCut ([Formula: see text]) and demonstrated higher agreement with the manual contour with respect to threshold-based methods. Compared with manual contouring, editing the IGC achieved the GTV in significantly less time ([Formula: see text]). The IGC algorithm offers a highly repeatable functional volume and serves as an effective initial guess that can well minimize the time spent on labor-intensive manual contouring.				
232.	Hoest, C., Seidman, J. C., Lee, G., Platts-Mills, J. A., Ali, A., Olortegui, M. P., Bessong, P., Chandyo, R., Babji, S., Mohan, V. R., Mondal, D., Mahfuz, M., Mduma, E. R., Nyathi, E., Abreu, C., Miller, M. A., Pan, W., Mason, C. J. and Knobler, S. L. Vaccine coverage and adherence to EPI schedules in eight resource poor settings in the MAL-ED cohort study Vaccine; 2017, 35 (3): 443-451 **Address:** Division of International Epidemiology and Population Studies of Fogarty International Center, National Institutes of Health, 16 Center Drive, Bethesda, MD 20892, USA. **Electronic Address:** christel.host@nih.gov Division of International Epidemiology and Population Studies of Fogarty International Center, National Institutes of Health, 16 Center Drive, Bethesda, MD 20892, USA. Department of International Health, Johns Hopkins University, Baltimore, MD, 21205, USA. Division of Infectious Diseases and International Health, University of Virginia, P.O. Box 801340, 345 Crispell Drive, Carter Harrison Building, Charlottesville, VA 22908, USA. Aga Khan University, Department of Pediatrics and Child Health, Stadium Road, Karachi, Pakistan. Asociaciomicronn Benefica Proyectos de Informatica, Salud, Medicina, y Agricultura (A.B. PRISMA), Ramirez Hurtado 622, Iquitos, Peru. HIV/AIDS and Global Health Research Programme, University of Venda, Thohoyandou 0950, South Africa. Department of Child Health, Institute of Medicine, Tribhuvan University, Katmandu, Nepal; Centre for International Health, University of Bergen, P.O. Box 7800, 5020 Bergen, Norway. Department of Gastrointestinal Sciences/Department of Community Health, **Christian Medical College, Vellore,** Tamil Nadu 632004, India. Nutrition and Clinical Services Division, International Centre For Diarrhoeal Disease Research, Bangladesh (icddr,b), 68 Shaheed Tajuddin Ahmed Sarani, Mohakhali, Dhaka 1212, Bangladesh. Haydom Lutheran Hospital, POB 9041, Haydom, Manyara Region, Tanzania. Instituto de Biomedicina, Departamento de Fisiologia e Farmacologia, Faculdade de Medicina Federal University of Ceara, Rua Coronel Nunes de Melo,	**INT**	**JAN TO JUN**	**COMMUNITY HEALTH**	**PMID:**27998640 **Impact Factor:** 3.235 **H-Index:**151

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	1315, CEP: 60.430-270 - C.P. 3229 - Porangabussu, Fortaleza Ceara, Brazil. Department of Environmental Science and Policy and the Duke Global Health Institute, Duke University, Durham, NC, USA. Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand. **BACKGROUND:** Launched in 1974, the Expanded Program on Immunization (EPI) is estimated to prevent two-three million deaths annually from polio, diphtheria, tuberculosis, pertussis, measles, and tetanus. Additional lives could be saved through better understanding what influences adherence to the EPI schedule in specific settings. **METHODS:** The Etiology, Risk Factors and Interactions of Enteric Infections and Malnutrition and the Consequences for Child Health and Development (MAL-ED) study followed cohorts in eight sites in South Asia, Africa, and South America and monitored vaccine receipt over the first two years of life for the children enrolled in the study. Vaccination histories were obtained monthly from vaccination cards, local clinic records and/or caregiver reports. Vaccination histories were compared against the prescribed EPI schedules for each country, and coverage rates were examined in relation to the timing of vaccination. The influence of socioeconomic factors on vaccine timing and coverage was also considered. **RESULTS:** Coverage rates for EPI vaccines varied between sites and by type of vaccine; overall, coverage was highest in the Nepal and Bangladesh sites and lowest in the Tanzania and Brazil sites. Bacillus Calmette-Guerin coverage was high across all sites, 87-100%, whereas measles vaccination rates ranged widely, 73-100%. Significant delays between the scheduled administration age and actual vaccination date were present in all sites, especially for measles vaccine where less than 40% were administered on schedule. A range of socioeconomic factors were significantly associated with vaccination status in study children but these results were largely site-specific. **CONCLUSIONS:** Our findings highlight the need to improve measles vaccination rates and reduce delayed vaccination to achieve EPI targets related to the establishment of herd immunity and reduction in disease transmission.				
233.	Hrishi, Ajay Prasad and **Lionel, Karen Ruby** Periprocedural Management of Vein of Galen Aneurysmal Malformation Patients: An 11-Year Experience Anesthesia, Essays and Researches; 2017, 11 (3): 630-635. doi: 10.4103/aer.AER_252_16.	**INT**	**JUL TO DEC**	**ANESTHESIA**	**PMID:PMC**5594780

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	ADDRESS: **Address for correspondence:** Dr. Ajay Prasad Hrishi, Department of Anaesthesiology, Neuroanesthesia Division, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram, Kerala, India. E-mail: ni.ca.tsmitcs@yajard CONTEXT: The vein of Galen aneurysmal malformation (VGAM) is a rare arteriovenous malformation where a dilated median prosencephalic vein provides a low-resistance conduit for intracerebral blood flow resulting in high-output cardiac failure, severe pulmonary hypertension, with or without central nervous system symptoms secondary to hydrocephalus, in the neonatal and pediatric population. AIM:: This study aims to analysis of the anesthetic management of this unique subset of patients with VGAM. SETTINGS AND DESIGN:: This was a retrospective analysis of case series of VGAM patients admitted between January 2005 and June 2016 in our Institute. SUBJECTS AND METHODS:: Case records of VGAM patients were reviewed for the anesthetic technique and medications administered. The incidence of intra-and post-procedural complications and their management and outcomes were analyzed. STATISTICAL ANALYSIS:: Parametric data were expressed as mean and standard deviation. Descriptive statistics was used for describing associated pathologies, drugs and monitors used during the procedure, incidence of any adverse events, and the treatment protocol. RESULTS:: Twenty-one patients underwent treatment for the VGAM. There were a total of forty anesthetics administered for embolization, diagnostic angiography, and magnetic resonance imaging. Eighty-five percent had increased head circumference, 40% had associated focal neurological deficits, and 15% had seizures as presenting symptoms. Cardiac anomalies were seen in 41% of the patients, and difficult airway was anticipated in 38% of the patients. The majority of the patients had inhalational induction (62.2%) and inhalation maintenance (84.4%) of anesthesia. Intraprocedural adverse events were noted in 43% and postprocedure complications in 38% of the patients. CONCLUSION:: Anesthetic management for embolization of VGAM with a combination of opioids and inhalational agents helps in minimizing the incidence of intraprocedural adverse events and provides a better hemodynamic profile. PMC				
234.	Huang, X. J., Liu, K., Ritchie, D., Andersson, B., Lu, J., Hou, J., Burguera, A. F., Wang, J., Yeoh, A., Yan, C., Zhou, D., Tan, D., Kim, D. W., Wu, D., Shpall, E., Kornblau, S., Neelapu, S., Hongeng, S., Li, J., Hu, J., Zhang, L. S., Wang, M., Malhotra, P., Jiang, Q., Qin, Y., Wong, R., Champlin, R., Hagemeister, F., Westin,	**INT**	**JAN TO JUN**	**HEMATOLOGY**	**PMID:**28404929 **Impact Factor:** 5.168 **H-Index:**66

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	J., Iyer, S., Mathews, V., Wang, Y., Hu, Y., Xiao, Z., Shao, Z., Orlowski, R. Z., Chim, C. S., Mulligan, S., Sanz, M., Ozawa, K., Parmar, S. and Issaragrisil, S. Hematology oncology practice in the Asia-Pacific APHCON survey results from the 6th international hematologic malignancies conference: bridging the gap 2015, Beijing, China Oncotarget; 2017, 8 (25): 41620-41630 **Address:** Peking University People's Hospital, Peking University Institute of Hematology, Beijing, China. Royal Melbourne Hospital, Melbourne, Australia. MD Anderson Cancer Center, Houston, Texas, USA. Shanghai Changzheng Hospital, Shanghai, China. MD Anderson Cancer Center, Madrid, Spain. Chinese Academy of Medical Sciences & Peking Union Medical College, Beijing, China. National University Hospital, Singapore. Seoul St. Mary's Hospital, S. Korea. Singapore General Hospital, Singapore. First Affiliated Hospital of Soochow University, Jiangsu Institute of Hematology, Jiangsu, China. Ramathibodi Hospital, Bangkok, Thailand. First Affiliated Hospital of Nanjing Medical University, Jiangsu Province Hospital, Nanjing, China. Ruijin Hospital, Shanghai, China. Gansu Provincial Key Laboratory of Hematology, Lanzhou, China. Post Graduate Institute of Medical Education and Research, Chandigarh, India. Prince of Wales Hospital, The Chinese University of Hong Kong, Hong Kong, China. Methodist Hospital, Houston, Texas, USA. **Christian Medical College and Hospital, Vellore**, India. Wuhan Union Hospital, Wuhan, China. Institute of Hematology and Hospital of Blood Diseases, Chinese Academy of Medical Sciences, Tianjin, China. General Hospital of Tianjin Medical University, Tianjin, China. Queen Mary Hospital, Hong Kong. Royal North Shore Hospital, University of Sydney, Australia. University Hospital La Fe, Valencia, Spain. The Institute of Medical Science, University of Tokyo, Japan. Faculty of Medicine Siriraj Hospital, Bangkok, Thailand. This report serves as a snapshot of the state-of-knowledge in the Asia Pacific (APAC) Hematology Oncology community, and establishes a baseline for longitudinal investigations to follow changes in best practices over time. The objective of this study was to understand the approach to hematologic diseases, common standards of care and best practices, issues that remain controversial or debated, and educational or resource gaps that warrant attention. We used mobile application to disseminate and distribute questionnaires to delegates during the 6th				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	international hematologic malignancies conference hosted by the APAC Hematology Consortium at Beijing, China. User responses were collected in an anonymous fashion. We report survey results in two ways: the overall responses, and responses as stratified between Chinese physicians and "Other" represented nationalities. Overall geographical concordance in survey responses was positive and strong. Perhaps more interesting than instances of absolute agreement, these data provide a unique opportunity to identify topics in which physician knowledge or opinions diverge. We assigned questions from all modules to broad categories of: patient information; diagnosis; treatment preference; transplantation; and general knowledge/opinion. On average, we observed a geographic difference of 15% for any particular answer choice, and this was fairly constant across survey modules. These results reveal utility and need for widespread and ongoing initiatives to assess knowledge and provide evidence-based education in real time. The data will be made more valuable by longitudinal participation, such that we can monitor changes in the state of the art over time.				
235.	Hussain, Asif, Sivakumar Balasubramanian, Nick Roach, Julius Klein, Nathanael Jarrassé, Michael Mace, Ann David, Sarah Guy, and Etienne Burdet. "SITAR: a system for independent task-oriented assessment and rehabilitation." Journal of Rehabilitation and Assistive Technologies Engineering 4 (2017): 2055668317729637. **Address:** 1.Department of Bioengineering, Imperial College of Science, Technology and Medicine, London, UK 2. School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore 3. Department of Bioengineering, **Christian Medical College, Vellore,** India 4. Tecnalia Research and Innovation, San Sebastian, Spain 5. CNRS, Institut des Syste`mes Intelligents et de Robotique, Universite´ Pierre et Marie Curie, Paris, France *These authors have equal contribution Abstract: Introduction: Over recent years, task-oriented training has emerged as a dominant approach in neurorehabilitation. This article presents a novel, sensor-based system for independent task-oriented assessment and rehabilitation (SITAR) of the upper limb. Methods: The SITAR is an ecosystem of interactive devices including a touch and force–sensitive tabletop and a set of intelligent objects enabling functional interaction. In contrast to most existing sensor-based systems,	**INT**	**JUL TO DEC**	**BIOENGINEERING**	**Indexed in Emerging Sources Citation Index**

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	SITAR provides natural training of visuomotor coordination through collocated visual and haptic workspaces alongside multimodal feedback, facilitating learning and its transfer to real tasks. We illustrate the possibilities offered by the SITAR for sensorimotor assessment and therapy through pilot assessment and usability studies. Results: The pilot data from the assessment study demonstrates how the system can be used to assess different aspects of upper limb reaching, pick-and-place and sensory tactile resolution tasks. The pilot usability study indicates that patients are able to train arm-reaching movements independently using the SITAR with minimal involvement of the therapist and that they were motivated to pursue the SITAR-based therapy. Conclusion: SITAR is a versatile, non-robotic tool that can be used to implement a range of therapeutic exercises and assessments for different types of patients, which is particularly well-suited for task-oriented training.				
236.	Inbaraj, L. R., Rose, A., George, K. and Bose, A. Incidence and Impact of Unintentional Childhood Injuries: A Community Based Study in Rural South India Indian J Pediatr; 2017, 84 (3): 206-210 **Address:** Department of Community Health, Bangalore Baptist Hospital, Bangalore, Karnataka, 560024, India. leeberk2003@gmail.com Department of Community Health, **Christian Medical College, Vellore,** Tamil Nadu, India. **OBJECTIVE:** To estimate the incidence of unintentional childhood injuries and to assess the impact of injury during childhood. **METHODS:** This is a cross sectional study, conducted in 13 clusters of a rural block in Vellore. Children were screened by two-stage cluster sampling method by two weeks and three months recall method. The primary caregivers of injured children were administered a questionnaire to assess the impact of the injury. **RESULTS:** Childhood injury related morbidity was 292.5 per 1000 y. Children between 10 and 14 y (4.6%) and boys (4.5%) had a higher rate of injury. Fall (43.1 %) was the most common cause of injury followed by RTIs (Road Traffic Incidents- 27.6%). Work absenteeism for primary caregivers ranged from 1 to 60 (IQR 2-7) days. Sickness absenteeism ranged from 1 to 45 d with a mean of 7.64 (IQR 2-7) days. Half of the children missed school after an injury. The days spent with temporary disability ranged from 1 to 60 d with a mean of 11.79 (IQR 2-7) d	**NAT**	**JAN TO JUN**	**COMMUNITY HEALTH**	**PMID:**27864749 **Impact Factor:** 0.945 **H-Index:**40

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	and 7.73% had permanent disability. **CONCLUSIONS:** Unintentional childhood injury is a neglected public health problem which leads to sickness absenteeism and disability. Boys and older children are the most common victims of injury. There is a need for establishing state or nationwide injury registries to help understand accurate estimates of disability-adjusted life year (DALY) and loss of productivity.				
237.	Inbaraj, L. R., Rose, A., George, K. and Bose, A. Perception of unintentional childhood injuries among mothers in rural South India Indian J Public Health; 2017, 61 (3): 211-214 **Address:** Consultant, Department of Community Health, Bangalore Baptist Hospital, Bengaluru, Karnataka, India. Associate Professor, Department of Community Health, **Christian Medical College, Vellore,** Tamil Nadu, India. Professor, Department of Community Health, **Christian Medical College, Vellore,** Tamil Nadu, India. Parental perception of safe and risk-free environment is critical in the prevention of unintentional childhood injury. In this cross-sectional study, hundred mothers from 13 clusters were interviewed to assess the perception of mothers regarding the risks and hazards leading to unintentional childhood injuries from March to April 2013. A tool developed by Glik et al. was used. Mothers' perception of likelihood of injury from hazards such as household door and drawers, small toys, plastic bags, and cribs was poor. Mothers had a poor perception of injury by entrapment in refrigerators, choking, and strangulation by a rope. Age, education, and literacy ($P < 0.05$) were found to be significant predictors of perception of risk and hazard. Very few mothers (9%) believed injuries can be completely prevented and illiteracy ($P < 0.05$) was associated with poor perception on prevention. Health education should focus on improving maternal perception which may bring positive impact on prevention.	**NAT**	**JUL TO DEC**	**COMMUNITY HEALTH**	**PMID:**28928307 **Impact Factor:**1.090 **H-Index:**19
238.	Indrani Sen, Rekha Samuel, Jennifer Prabhu, Albert Abhinay Kota, Sunil Agarwal1 Malignant Triton Tumor: Role of Electron Microscopy in Determining Differentiation Ind J Vascular and Endovascular Surgery 2017 Jan-Mar; 1 (4)_20-22	**NAT**	**JAN-JUN**	VASCULAR SURGERY	**No PMID Indexed in:** ICI, Pubmed
239.	Indu, P. S., Anilkumar, T. V., Pisharody, R., Russell, P. S. S., Raju, D., Sarma, P. S., Remadevi, S., Amma, Krli, Sheelamoni, A. and Andrade, C. Primary care Screening Questionnaire for Depression: reliability and validity of a	**INT**	**JAN TO JUN**	**PSYCHIATRY, CHILD AND ADOLESCENT PSYCHIATRY**	**PMID:**28446960 **Impact Factor:**7.06 **H-Index:**NA

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	new four-item tool BJPsych Open; 2017, 3 (2): 91-95 **Address:,** MD, DPM, PhD, Department of Community Medicine, Government Medical College, Trivandrum, India., DNB, DPM, MPhil, Department of Psychiatry, Government Medical College, Trivandrum, India., MD, DM, Clinical Epidemiology Resource Training Centre, Government Medical College, Trivandrum, India., MD, Child and Adolescent Psychiatry Division, **Christian Medical College, Vellore,** Tamil Nadu, India., MD, Department of Psychiatry, Government Medical College, Trivandrum, India., PhD, Department of Biostatistics, Achutha Menon Centre for Health Science Studies, Sree ChitraTirunal Institute for Medical Sciences and Technology, Trivandrum, India., PhD, Medico-Sociology, Community Medicine, Government Medical College, Trivandrum, India., MD, Department of Community Medicine, Government Medical College, Trivandrum, India., MD, PhD, Clinical Epidemiology Resource Training Centre, Government Medical College, Trivandrum, India., MD, Department of Psychopharmacology, National Institute of Mental Health and Neurosciences, Bangalore, India. **BACKGROUND:** Unidentified depression in primary care is a public health concern, globally. There is a need for brief, valid and easily administered tools in primary care. **AIMS:** To estimate reliability and validity of the newly developed Primary care Screening Questionnaire for Depression (PSQ4D), a four-item tool, with 'yes' or 'no' options. **METHOD:** PSQ4D was administered verbally (time required, <1 min) by primary care physicians to adult outpatients (n=827) in six primary care settings in Kerala, India. A psychiatrist evaluated each patient on the same day, using ICD-10 Diagnostic Criteria for Research, based on unstructured clinical interview. **RESULTS:** The Cronbach's alpha for internal consistency reliability was 0.80; kappa coefficient for test-retest reliability was 0.9 and that for interrater reliability was 0.72. At a score >/=2, sensitivity was 0.96, specificity was 0.87, positive predictive value was 0.74, negative predictive value was 0.98, positive likelihood ratio was 7.4 and negative likelihood ratio was 0.05. **CONCLUSIONS:** When physician administered, PSQ4D has good reliability. At a cut-off score of >/=2, it has high sensitivity and specificity to identify depressive disorder in primary care. DECLARATION OF INTEREST: None. COPYRIGHT AND USAGE: (c) The Royal College of Psychiatrists 2017. This is an open access article distributed under the terms of the Creative Commons Non-Commercial, No			**DIVISION**	

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Derivatives (CC BY-NC-ND) license.				
240.	Indu, P. S., Anilkumar, T. V., Pisharody, R., Russell, P. S. S., Raju, D., Sarma, P. S., Remadevi, S., Amma, Krli, Sheelamoni, A. and Andrade, C. Prevalence of depression and past suicide attempt in primary care Asian J Psychiatr; 2017, 27 48-52 **Address:** Department of Community Medicine, Government Medical College, Trivandrum, Kerala, India; Clinical Epidemiology Resource & Training Centre, Government Medical College, Trivandrum, Kerala, India. Electronic **Address:** indupsaniltv@gmail.com. Department of Psychiatry, Government Medical College, Trivandrum, Kerala, India; Clinical Epidemiology Resource & Training Centre, Government Medical College, Trivandrum, Kerala, India. Clinical Epidemiology Resource & Training Centre, Government Medical College, Trivandrum, Kerala, India. Department of Child Psychiatry, **Christian Medical College, Vellore,** India. Department of Psychiatry, Government Medical College, Trivandrum, Kerala, India. Department of Biostatistics, Achutha Menon Centre for Health Science Studies, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, India. Department of Community Medicine, Government Medical College, Trivandrum, Kerala, India; Clinical Epidemiology Resource & Training Centre, Government Medical College, Trivandrum, Kerala, India. Department of Community Medicine, Government Medical College, Trivandrum, Kerala, India. Department of Psychopharmacology, National Institute of Mental Health and Neurosciences, Bangalore, India. **BACKGROUND:** It is known that persons who die by suicide commonly visit a primary care physician (PCP) shortly before the fatal act.There is little information on history of suicide attempt in depressed patients who consult PCPs for non-mental health indications.This information is important because past history of suicide attempt is a known predictor of future suicide risk. **OBJECTIVE:** To estimate the prevalence of depression among outpatients in primary care and to determine the prevalence and determinants of past suicide attempt among them. **METHOD:** This cross-sectional study was conducted in six primary care settings, both public and private, in Kerala, India. A psychiatrist evaluated adult outpatients (n=827), diagnosed depression using ICD-10 Diagnostic Criteria for Research, and elicited history of suicide attempt. **RESULTS:** Overall depression prevalence was	**INT**	**JAN TO JUN**	**CHILD PSYCHIATRY**	**PMID:**28558895 **Impact Factor:** 0.450 **H-Index:**28

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	27.2% and was higher in women. Past suicide attempt was identified in 6.9% (95% CI, 5.17-8.63%) of all outpatients; higher in women (9.2%) than men (3.6%). Among the depressed, 21.3% had previously attempted suicide; while this figure was 1.5% in the non-depressed. The prevalence of current depression was 81% (severe depression, 61%) in patients reporting past suicide attempts. In univariate analyses, female gender, perceived financial stress, and being depressed were significantly associated with past suicide attempts. In multivariate analysis, current depression was the largest predictor of past suicide attempt (adjusted odds ratio, 14.3; 95% CI, 6.60-31.07). **CONCLUSION:** Depression and suicide attempt are both common in primary care. Depression is the single most important predictor of suicide attempt.				
241.	Isaac BTJ(1), Clarke SE(2), Islam MS(2), Samuel JT(2). Screening for obstructive sleep apnoea using the STOPBANG questionnaire and the Epworth sleepiness score in patients admitted on the unselected acute medical take in a UK hospital. Clin Med (Lond). 2017 Dec;17(6):499-503. doi: 10.7861/clinmedicine.17-6-499. Author information: (1)Basildon and Thurrock University Hospital, Basildon, UK barneyisaac98@gmail.com (2)Basildon and Thurrock University Hospital, Basildon, UK. Obstructive sleep apnoea (OSA), which is often overlooked in patients presenting to primary and secondary care, is an increasingly common comorbidity. The prevalence of OSA has not been studied in the unselected acute medical take. The aim of this study was to screen for the prevalence of undiagnosed OSA using the STOPBANG Questionnaire and the Epworth sleepiness scale (ESS) score in an unselected acute medical take. This was a cross-sectional study in a busy UK general hospital. Patient demographics, comorbidities, ESS and STOPBANG scores on unselected acute medical takes were reviewed and analysed to assess the prevalence of OSA. Of 93 patients screened, more than 50% were obese. The STOPBANG score was ≥3 in 73%. The ESS was significantly increased (≥11) in 20%. On multivariate analysis, ESS continued to remain independently associated with the STOPBANG score with a p-value of 0.04. The routine use of the STOPBANG questionnaire followed by an ESS score in those with a score of ≥3 may focus evaluation for undetected OSA in the acute medical care setting. © Royal College of Physicians 2017. All rights reserved. DOI: 10.7861/clinmedicine.17-6-	**INT**	**JUL TO DEC**	**PULMONARY MEDICINE**	**PMID:**29196349 **WOS:**000417550800004 **Impact Factor:**1.423 **H-Index:**44

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	499				
242.	Isaac, R., Paul, B., Geethanajali, F. S., Kang, G. and Wanke, C. Role of intestinal dysfunction in the nutritional compromise seen in human immunodeficiency virus-infected adults in rural India Trop Doct; 2017, 47 (1): 44-48 **Address:** Associate Professor, RUHSA Department, **Christian Medical College, Vellore,** Tamil Nadu, India rita.isaac@cmcvellore.ac.in Associate Professor, RUHSA Department, **Christian Medical College, Vellore,** Tamil Nadu, India. Professor, Department of Clinical Biochemistry, **Christian Medical College, Vellore,** Tamil Nadu, India. Professor, Department of Gastrointestinal Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. Professor, Department of Public Health and Community Medicine, Tufts University School of Medicine, Boston, Massachusetts, USA. Human immunodeficiency virus (HIV) disease progression is often marked by significant weight loss with or without chronic diarrhoea. We studied the extent of intestinal dysfunction using a D-xylose absorption test and association with nutritional compromise as measured by body mass index (BMI) and serum antioxidants levels in HIV-infected individuals through a cross-sectional survey of 45 ART naive, HIV-positive and 45, age-socioeconomic status matched negative controls in a rural population in India. More than 40% of HIV-positive and HIV-negative participants had intestinal dysfunction (42.2% vs. 44.4%). However an increasing gradient of low D-xylose absorption was noted with decreasing CD4 counts (32%, 50% and 58.3% among those with >350, 200-350 and <200 cells/mm3, respectively). Multivariate analysis revealed a significant association between intestinal dysfunction and low BMI (P = 0.03) independent of HIV infection and calorie intake per day (P = 0.02). Weight loss in HIV-infected individuals should be investigated for intestinal dysfunction especially in low resource settings.	**INT**	**JAN TO JUN**	**RUHSA, CLINICAL BIOCHEMISTRY, GASTROINTESTINAL SCIENCES**	**PMID:**26809467 **Impact Factor:** 0.450 **H-Index:**28
243.	Iyyadurai, Ramya, Asirvatham, Ruth, Satyendra, Sowmya and Surekha, V Langerhans cell histiocytosis involving the liver Current Medical Issues; 2017, 15 (2): 131-135	**NAT**	**JAN TO JUN**	**MEDICINE UNIT V**	**Not Indexed in PubMed**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: 1. Department of Medicine, **CMC, Vellore**, Tamil Nadu, India 2. Department of Pathology, University of Michigan, USA 3. Department of Geriatrics, **CMC, Vellore**, Tamil Nadu, India Langerhans cell histiocytosis is a group of disorders caused by proliferation of the histiocytes. This is a rare neoplastic disease with multisystem involvement. We present a case of an adult male with intermittent fever, recurrent jaundice suggestive of predominant liver involvement. He had undergone multiple courses of anti-tuberculosis treatment with no improvement. Biopsy of the lymph node in our hospital showed Langerhan 39;s cell histiocytosis and liver biopsy showed bridging fibrosis. This case report highlights liver involvement in Langerhans cell histiocytosis with lung and lymph node involvement occurring later, which is an uncommon presentation of this rare disease.				
244.	J Mathew1, A Ganapati1, R Goel1, S Pulikool1, AJ Mathew1, R Janardhana1, M Gowri2, D Danda1 Descriptive study of asian indian patients with rheumatoid vasculitis in retrospect: a single, tertiary care centre experience – (Poster Presentations – Vasculitis - THU0322) Annals of the Rheumatic Diseases; 2017, 76 325-325 **Author affiliations** Rheumatology Biostatistics, **Christian Medical College, Vellore India,** Vellore, India Abstract: Background Rheumatoid vasculitis (RV) is a severe extra-articular manifestation of rheumatoid arthritis (RA), with high morbidity and mortality reported in literature Objectives To describe the Asian Indian perspective on RV patients, their clinico-laboratory features and their outcome along with the factors affecting them. Methods A retrospective review of electronic medical records of 8984 RA patients from January 2007 to August 2016, was done for those satisfying Scott & Bacon criteria for RV1. Probable RV was defined as patients not satisfying Scott & Bacon Criteria, but were managed like RV after exclusion of alternate diagnosis. Birmingham Vasculitis activity score (BVAS) version 32 was used for monitoring activity of RV Results 63 patients of RV were identified, with a study	**INT**	**JUL TO DEC**	**RHEUMATOLOGY, BIOSTATISTICS**	**NO PMID** **WOS:**000413181401005 **Impact Factor:**12.811 **H-Index:**189

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	period prevalence of 0.7%, in our RA cohort. 33 (52.4%) patients were female. Mean age of patients was 50.7±11.5 years with median duration of RA being 6 years. Involvement of Peripheral Nervous System (PNS) was the commonest manifestation of RV in 52/63 (82.5%) patients followed by skin in 34/63 (53.9%) patients. Rheumatoid Nodule was seen in 14/ 63 (22.2%) patients. Percentage of current and ex-smokers combined,was same as rheumatoid nodule prevalence. 52 (82.5%) patients had biopsy evidence of vasculitis.26/51 (50.9%)patients were started on mycophenolate mofetil, 13/51 (25.5%)patients on cyclophosphamide, 8/51 (15.7%) patients on azathioprine, 4/51 (7.8%) patients on Methotrexate as immunosuppressive (IS) agent along with mean dose of 46.6±13.7 (0.86±0.23mg/kg/day) prednisolone. Additionally, Rituximab & IVIg were used in 2 patients each respectively. 3 months after initiation of immunosuppression 26/50 (52%) patients on follow-up were in remission and 39/47 (82.9%) patients attained remission at 6 months. Mean time to achieve remission was 151.1±86.3 days. All IS agents were equally effective in inducing remission at 3 and 6 months and showed statistically similar BVAS reduction at 3 and 6 months from baseline (t test & chi-square test). 7 (11.2%) deaths noted in the cohort at their respective last visit during 195.3 patient years cumulative follow up. Multiple regression analysis showed that at baseline, presence of PNS involvement, eosinophilia, thrombocytosis, higher BVAS score and higher steroid requirement were predictors of persistently active vasculitis and absence of eye involvement and higher hemoglobin % at baseline were predictors for remission, at 3 months ($p<0.05$). 4/50 (8%) patients had relapse of vasculitic symptoms. 2 and 5 year survival rates were 96.2% and 83.9% respectively Conclusions Our cohort of Asian Indian RV was comparitively younger with lesser RA duration, less percentage of ever-smokers, lesser rheumatoid nodule prevalence, higher PNS involvement with better survival/mortality rates compared to published literature. All IS agents showed equal rates of BVAS remission & BVAS reduction at 3 and 6 months of treatment. http://dx.doi.org/10.1136/annrheumdis-2017-eular.5993				
245.	J Varghese, JV James, M Jacob Diet-Induced Insulin Resistance in Mice is Associated with Decreased Levels of Liver Iron and Serum Hepcidin AMERICAN JOURNAL OF HEMATOLOGY 92 (8), E304-E304	**INT**	**JUL TO DEC**	**HAEMATOLOGY**	**NO PMID** **WOS:**000405417100140 **Impact Factor:**5.275 **H-Index:**83
246.	Jacob, K. S.	**INT**	**JAN TO**	**PSYCHIATRY**	**PMID:**28063878

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Mental health services in low-income and middle-income countries Lancet Psychiatry; 2017, 4 (2): 87-89 **Address: Christian Medical College, Vellore** 632002, India. Electronic **Address:** ksjacob@cmcvellore.ac.in		**JUN**		**Impact Factor:** 11.588 **H-Index:**27
247.	Jacob, K. S. Insight in psychosis: Standards, science, ethics and value judgment Int J Soc Psychiatry. 2017 Jun;63(4):345-351. doi: 10.1177/0020764017693655. Epub 2017 Feb 1. **Address: Christian Medical College, Vellore,** Vellore, India. **BACKGROUND:** The clinical assessment of insight solely employs biomedical perspectives and criteria to the complete exclusion of context and culture and to the disregard of values and value judgments. **AIM:** The aim of this discussion article is to examine recent research from India on insight and explanatory models in psychosis and re-examine the framework of assessment, diagnosis and management of insight and explanatory models. **METHODS:** Recent research from India on insight in psychosis and explanatory models is reviewed. **RESULTS:** Recent research, which has used longitudinal data and adjusted for pretreatment variables, suggests that insight and explanatory models of illness at baseline do not predict course, outcome and treatment response in schizophrenia, which seem to be dependent on the severity and quality of the psychosis. It supports the view that people with psychosis simultaneously hold multiple and contradictory explanatory models of illness, which change over time and with the trajectory of the illness. It suggests that insight, like all explanatory models, is a narrative of the person's reality and a coping strategy to handle with the varied impact of the illness. **CONCLUSION:** This article argues that the assessment of insight necessarily involves value entailments, commitments and consequences. It supports a need for a broad-based approach to assess awareness, attribution and action related to mental illness and to acknowledge the role of values and value judgment in the evaluation of insight in psychosis.	**INT**	**JAN TO JUN**	**PSYCHIATRY**	**PMID:**28504043 **Impact Factor:** 1.380 **H-Index:**49
248.	Jacob, K. S.	**INT**	**JUL TO**	**PSYCHIATRY**	**PMID:**28704238

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Perspectives about mental health, illness, and recovery Curr Opin Psychiatry; 2017, 30 (5): 334-338 **Address:Christian Medical College, Vellore,** India. PURPOSE OF REVIEW: Patient and physician perspectives about mental health, illness, and recovery, which affect different aspects of help seeking and healthcare, needs to be understood and theorized. RECENT FINDINGS: People seem to simultaneously hold multiple and contradictory illness beliefs and seek help from diverse sources of cure and healing. Explanatory models elicited at baseline do not predict outcomes of illness, change over time, and are dependent on the interaction between the trajectory of individual's illness and the sociocultural milieu. Illness narratives contextualize the patient, describe the patient's reality and his/her ways of coping, and attempt to make sense of illness experiences, control them, and improve quality of life. On the other hand, diversity of beliefs among psychiatrists, family physicians, and public health specialists is dependent on their disciplinary perspectives. Nevertheless, the variability within psychiatric syndromes and the inability to predict individual trajectories of illness support cultural beliefs about uncertainties of life. These are identified by cultures through idioms and metaphors and labeled as luck, chance, karma, fate, punishment by God, evil spirits, black magic, disease and so on. SUMMARY: There is a need for a broad-based approach to mental health, which allows individuals to make sense of their contexts and find meaning in life.		**DEC**		**Impact Factor:** 4.020 **H-Index:**72
249.	Jacob, K. S. Suicide prevention in low- and middle-income countries: part perceptions, partial solutions Br J Psychiatry; 2017, 211 (5): 264-265 **Address:** K. S. Jacob, MD, PhD, FRCPsych, Department of Psychiatry, **Christian Medical College, Vellore** 632002, India. Email: ksjacob@cmcvellore.ac.in. Suicide, a common cause of death in many low- and middle-income countries, has often been viewed through a medical/psychiatric lens. Such perspectives medicalise social and personal distress and suggest individual and medication-based treatments. This editorial argues for the need to examine suicide from a public health perspective and suggests the need for population-based social and	**INT**	**JUL TO DEC**	**PSYCHIATRY**	**PMID:**29092834 **Impact Factor:**6.347 **H-Index:**192

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	economic interventions.				
250.	Jacob, K. S. Medicine and Society Suicide in India: Part perceptions, partial insights, and inadequate solutions Natl Med J India; 2017, 30 (3): 155-158 **Address:** Department of Psychiatry, **Christian Medical College, Vellore** 632002, Tamil Nadu, India. Suicide is a complex phenomenon, often linked to environment. Despite the identification of many social, cultural, economic and political correlates and risk factors, psychiatry continues to argue for curative solutions based on the reductionistic biomedical model, rather than support public health measures to manage the larger sociocultural, economic and political context. While psychiatry and curative medicine help many people, survival of the human body is best explained by the materialist explanation that locates the variation in health and longevity to tangible resources. There is no single, simple or straightforward solution to reducing population suicide rates; specific mental health interventions are unlikely to impact secular trends in the rates of suicide.	**NAT**	**JUL TO DEC**	**PSYCHIATRY**	**PMID:**28937004 **WOS:**000411919300014 **Impact Factor:**1.412 **H-Index:**35
251.	Jacob, K. S. Theorizing medical practice for India Natl Med J India; 2017, 30 (4): 183-186 **Address:** Department of Psychiatry, **Christian Medical College, Vellore,** Tamil Nadu, India	**NAT**	**JUL TO DEC**	**PSYCHIATRY**	**PMID:**29162748 **Impact Factor:** 1.412 **H-Index:**35
252.	Jacob, Molly, Venkatesan, Padmanaban, Varghese, Joe, James, Jithu and Prasad, Jasmin Hepcidin-Ferritin Ratio is Decreased in Diabetes Mellitus American Journal of Hematology; 2017, 92 (8): E303-E303	**INT**	**JUL TO DEC**	**CLINICAL BIOCHEMISTRY**	**NO PMID** **WOS:**000405417100139 **Impact Factor:**5.275 **H-Index:**83
253.	Jagdish, K., Jacob, S., Varughese, S., David, V. G., Mohapatra, A., Valson, A., Tulsidas, K., Veerasami, T. and Alexander, S. Effect of Double Filtration Plasmapheresis on Various Plasma Components and Patient Safety: A Prospective Observational Cohort Study	**NAT**	**JUL TO DEC**	**NEPHROLOGY**	**PMID:**28904434 **PMCID:**5590415 **Impact Factor:**2.153

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Indian J Nephrol; 2017, 27 (5): 377-383 **Address:** Department of Nephrology, **Christian Medical College, Vellore,** Tamil Nadu, India. Double filtration plasmapheresis (DFPP) was historically used for blood group incompatible renal transplantation. Very few studies are available worldwide regarding its efficiency in removing specific plasma components, and safety. We conducted a prospective observational cohort study over 1 year on patients undergoing DFPP for various renal indications. There were 15 patients with 39 sessions. The pre- and post-procedure plasma samples of serum IgG, IgA, IgM, fibrinogen, calcium, phosphate, potassium, and magnesium were analyzed. The effluent albumin concentration was also measured, and complications during the hospital stay were recorded. Cumulative removal of serum IgG, IgA, IgM, fibrinogen, and albumin at the end of four sessions were 72%, 89%, 96%, 88.5%, and 21.3%, respectively and effluent albumin concentration was 1.75 - 2.0 times (range: 6.3 g/dl - 7.2 g/dl; mean +/- standard deviation (SD) - 7 g/dl +/- 0.3 g/dl) the preprocedural serum albumin (mean +/- SD - 3.5 g/dl +/- 0.5 g/dl). Removal of other plasma components were not statistically significant. Hypotensive episodes were observed only 16.6%, with the usage of effluent concentration albumin as replacement fluid despite an average 2.4 (mean +/- SD - 2.4 +/- 0.4 l) liters of plasma volume processing each session. DFPP removes IgG, IgA, IgM, fibrinogen, and albumin. The cumulative removal IgG (72%) is suboptimal, whereas IgA (89%) and IgM (96%) are comparable to historical controls. We observed lesser episodes (12.5%) of hypotension with effluent albumin concentration as replacement fluid, and all bleeding complications were observed when serum fibrinogen level was <50 mg/dl.				**H-Index:**14
254.	James, Jithu, Varghese, Joe, Vaulont, Sophie and Jacob, Molly Hepcidin Knock-Out Mice Develop Less Insulin Resistance than Wild-Type Mice when Fed a High-Fat Diet American Journal of Hematology; 2017, 92 (8): E306-E306	**INT**	**JUL TO DEC**	**CLINICAL BIOCHEMISTRY**	**NO PMID** **WOS:**000405417100142 **Impact Factor:**5.275 **H-Index:**83
255.	Janeela, M. A., Oommen, A., Misra, A. K. and Ramya, I. Paraquat poisoning: Case report of a survivor J Family Med Prim Care; 2017, 6 (3): 672-673 Address: Department of General Medicine, **Christian Medical College, Vellore,** Tamil	**NAT**	**JAN TO JUNE**	**GENERAL MEDICINE**	**PMID:29417032** **PMC ID:5787979** **Impact Factor:**0.670

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Nadu, India. N, N'-dimethyl-4, 4'-bipyridinium dichloride (paraquat) is a widely used synthetic, nonselective contact herbicide. Ingestion of toxic doses of paraquat can be fatal with life-threatening effects on the lungs, gastrointestinal (GI) tract, kidney, liver, heart, and other organs. Till date, there are no specific antidotes and none of the current treatments have proven efficacious. The prognosis is uniformly poor worldwide, including those who treat aggressively with multimodal therapies. Long-term survivors are few, and have GI and pulmonary complications. Hence, prevention needs to be the utmost priority, and on exposure, aggressive decontamination should be initiated. Although it is a very common herbicide, there are very few cases reported from India and awareness among people needs to be widened.				**H-Index:**NA
256.	Jared, S. R. and Rao, J. P. Transepithelial sodium transport across frog skin Adv Physiol Educ; 2017, 41 (3): 444-447 **Address:** Department of Physiology, **Christian Medical College, Vellore,** Tamil Nadu, India; and silviyajared@cmcvellore.ac.in. Department of Physiology, Kasturba Medical College, Madhav Nagar, Manipal, Karnataka, India.	**INT**	**JUL TO DEC**	**PHYSIOLOGY**	**PMID:**28679586 **Impact Factor:**1.823 **H-Index:**43
257.	Jasper, S., Vedula, S. S., John, S. S., Horo, S., Sepah, Y. J. and Nguyen, Q. D. Corticosteroids as adjuvant therapy for ocular toxoplasmosis Cochrane Database Syst Rev; 2017, 1 CD007417 **Address:** Department of Ophthalmology, **Christian Medical College,** Schell Campus, Arni Road, Vellore, Tamil Nadu, India, 632001. Johns Hopkins University, 3400 N. Charles Street, Baltimore, Maryland, USA, 21218. Byers Eye Institute, Stanford University, Palo Alto, California, USA. **BACKGROUND:** Ocular infection caused by Toxoplasma gondii, a parasite, may result in inflammation in the retina, choroid, and uvea, and consequently lead to complications such as glaucoma, cataract, and posterior synechiae. **OBJECTIVES:** The objective of this systematic review was to assess the effects of adjunctive use of corticosteroids to anti-parasitic therapy versus anti-parasitic therapy alone for ocular toxoplasmosis. **SEARCH METHODS:** We searched CENTRAL (which	**INT**	**JAN TO JUN**	**OPHTHALMOLOGY**	**PMID:**28125765 **Impact Factor:**6.124 **H-Index:**189

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	contains the Cochrane Eyes and Vision Trials Register (2016; Issue 11)), MEDLINE Ovid, Epub Ahead of Print, In-Process & Other Non-Indexed Citations, MEDLINE Ovid Daily (January 1946 to December 2016), Embase (January 1980 to December 2016), Latin American and Caribbean Literature on Health Sciences (LILACS (January 1982 to December 2016)), the ISRCTN registry (www.isrctn.com/editAdvancedSearch), ClinicalTrials.gov (www.clinicaltrials.gov), and the World Health Organization (WHO) International Clinical Trials Registry Platform (ICTRP; www.who.int/ictrp/search/en). We used no date or language restrictions in the electronic searches for trials. We last searched the electronic databases on 7 December 2016. SELECTION CRITERIA: We had planned to include randomized and quasi-randomized controlled trials. Eligible trials would have enrolled participants of any age who were immunocompetent and were diagnosed with acute ocular toxoplasmosis. Included trials would have compared anti-parasitic therapy plus corticosteroids versus anti-parasitic therapy alone, different doses or times of initiation of corticosteroids. **DATA COLLECTION AND ANALYSIS:** Two authors independently screened titles and abstracts retrieved through the electronic searches. We retrieved full-text reports of studies categorized as 'unsure' or 'include' after we reviewed the abstracts. Two authors independently reviewed each full-text report for eligibility. Discrepancies were resolved through discussion. **MAIN RESULTS:** We identified no completed or ongoing trial that was eligible for this Cochrane review. **AUTHORS'CONCLUSIONS:** Although research has identified a wide variation in practice regarding the use of corticosteroids, our review did not identify any evidence from randomized controlled trials for or against the role of corticosteroids in the management of ocular toxoplasmosis. Several questions remain unanswered by well-conducted randomized trials in this context, including whether the use of corticosteroids as an adjunctive agent is more effective than the use of anti-parasitic therapy alone; if so, when corticosteroids should be initiated in the treatment regimen (early versus late course of treatment), and what would be the best dose and duration of steroid use.				
258.	Jayakanthan, K., Gupta, A. N., Mathew, J., Ravindran, R., Mahasampth, G. and Danda, D. Clinical utility of anti-C1q antibody in primary and secondary vasculitic conditions Int J Health Sci (Qassim); 2017, 11 (5): 3-6 **Address:** Department of Clinical Immunology & Rheumatology, **Christian Medical College, Vellore,** Tamil Nadu, India.	**INT**	**JUL TO DEC**	**CLINICAL IMMUNOLOGY & RHEUMATOLOGY, BIOSTATISTICS**	**PMID:**29114186 **PMCID:**5669508 **Impact Factor:**1.135 **H-Index:**NA

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India. Objective: Anti-C1q antibodies (Anti-C1q Ab) are seen in hypocomplementemic urticarial vasculitis syndrome (HUVS), infection-associated vasculitis such as hepatitis C virus-related vasculitis and in autoimmune diseases such as rheumatoid vasculitis, polyarteritis nodosa, giant cell arteritis, vascular Behcet's disease, and cryoglobulin associated vasculitis. Aim of this study is to evaluate the presence of Anti-C1q Ab in vasculitis and to determine if any difference exists between primary and secondary vasculitis in relation to this antibody. Patients and Methods: Consecutive patients with diagnosis of either a primary or secondary vasculitis were recruited. Primary vasculitis were diagnosed by the American College of Rheumatology 1990 criteria. Clinical features and serological markers were noted. Anti-C1q Ab was assayed by commercially available ELISA kit (Demeditec Diagnostics GmbH, Germany). Results: Sixty-four patients were recruited for the study comprising of 41 primary vasculitis and 23 secondary vasculitis cases. No difference in Anti-C1q Ab levels between primary and secondary vasculitis was noted. Four patients were positive for Anti-C1q Ab out of the 64 patients. Of the four, one patient was diagnosed as HUVS, 2 patients as systemic lupus erythermatosus with vasculitis (16.7%) and another patient was diagnosed as rheumatoid arthritis with vasculitis (14.28%). Anti-C1q Ab negatively correlated with age and C3, but it correlated positively with erythrocyte sedimentation rate (ESR) in vascultic patients. Conclusion: Presence of anti-C1q Ab did not differ between the patients with primary and secondary vasculitis. Anti-C1q Ab titers correlated with younger age, high ESR, and low C3 in patients with vasculitis in our study.				
259.	Jayasimha, S. Nanotechnology in Urology Indian J Urol; 2017, 33 (1): 13-18 **Address:** Department of Urology, **CMC, Vellore,** Tamil Nadu, India. **INTRODUCTION:** Nanotechnology has revolutionized our approach to medical diagnostics as well as therapeutics and has spanned an entirely new branch of research. This review addresses the potential applications of Nanotechnology in	**NAT**	**JAN TO JUN**	**UROLOGY**	**PMID:**28197024 **Impact Factor:**5.157 **H-Index:**21

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Urology. This article is based on the Dr. Sitharaman Best Essay award of the Urological Society of India for 2016. **METHODS:** A PubMed search was performed for all relevant articles using the terms, "nanotechnology, nanoparticles, nanoshells, nanoscaffolds, and nanofibers." **RESULTS:** The developments in diagnostics include novel techniques of imaging of genitourinary malignancies, prostate-specific antigen measurement, early detection of mutations that are diagnostic for polycystic kidney disease. The potential applications of nanotechnology are in the targeted therapy of genitourinary malignancies, erectile dysfunction, overactive bladder, bladder reconstruction, construction of artificial kidneys and biodegradable stents as well as in robotic surgery. **CONCLUSIONS:** Nanotechnology is a rapidly emerging branch of research in urology with diverse and clinically significant applications in diagnostics as well as therapeutics.				
260.	Jeba Karunya.R , Daniel Sathiya S.S, Rabin K. Chacko Cost Analysis of Oral Cancer Treatment in a Tertiary Care Referral Center in India Asian Pacific Journal of Cancer Biology 2017 _ 2 (1): 17- 20 **Address:** 1.Department of Radiotherapy, Christian Medical College and Hospital. Vellore- 4, India. 2.Dental Department unit 2, **Christian Medical College and Hospital, Vellore** – 4, India. 3.Dental Department unit 1, **Christian Medical College and Hospital, Vellore**- 4, India. Abstract Introduction: As much as the number of oral cancer patients is a heavy burden to the health care system in India, so much is the economic burden to the patient and the relatives, especially in India where most do not have any financial cover for their medical expenditure. Objectives: To find out the approximate cost of treatment of oral cancer through various modalities, and calculate the proportion of direct and indirect expenses, and then identify the factors which would increase the indirect expenses so as to come up with recommendations which will reduce the indirect cost there by reducing the financial burden to the patient. Methods: A retrospective observational study was done in a tertiary care center for cancer treatment and the direct cost (medical expense), indirect cost (non-medical expense) incurred by the patients, their economic status and source of fund for payment of the expenses were obtained. Results: The proportion of indirect cost was about 38.72% of the total cost for patients who underwent a single modality	**INT**	**JAN-JUN**	**DENTAL – II**	**Indexed in Index Copernicus**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	treatment with surgery, around 34.73% for a combination treatment with surgery and RT (Radiotherapy), about 79.63% for treatment with conventional Radiotherapy without surgery and about 49.61% for treatment with IMRT (Intensity Modulated Radio Therapy) without surgery. Availability of financial aid or cover is abysmally poor. Rate of discontinuance of treatment is also very high according to this study. Conclusion: The proportion of indirect cost is very high and the total expenditure can be reduced by approximately 30% by following measures discussed in this article.				
261.	Jehangir, S. and David, D. D. Knotted urethral catheter: a twist in the tail BMJ Case Rep; 2017, 2017 **Address:** General Surgery, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Inadvertent knotting of infant feeding tubes used for clean intermittent catheterisation (CIC) is a rare complication in paediatric patients. The small flexible tubes used in infants if advanced too far into the bladder may form a knot as the bladder empties. Surgical intervention is required especially if it is lodged in the urethra. We present a case of a baby boy aged 4 months on CIC with a 6 Fr feeding tube, which required a meatotomy for removal. Education while instituting CIC must emphasise the length of catheter insertion, the chance of knotted catheter and steps to take if it occurs. A dedicated urotherapy nurse would be ideal.	**INT**	**JAN TO JUN**	**PAEDIATRIC SURGERY**	**PMID:**28473355 **Impact Factor:**NA **H-Index:**11
262.	Jehangir, S., Kurian, J. J., Jacob, T. J., Gurram, G. M., Thomas, R. J., Mathai, J. and Karl, S. Pneumonostomy in the Surgical Management of Hydatid Cyst of the Lung Eur J Pediatr Surg; 2017, 27 (2): 171-176 **Address:** Department of Paediatric Surgery, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Background Pneumonostomy in the surgical treatment of bilateral hydatid cyst of the lung(HCL) was described by Anand et al. This study presents the comparative	**INT**	**JAN TO JUN**	**PAEDIATRIC SURGERY**	**PMID:**27019148 **Impact Factor:** 1.313 **H-Index:**40

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	long-term results of pneumonostomy for simple and complicated HCL. Methods and Patients The pneumonostomy technique was applied to both open and minimally invasive operations. The cyst was opened, endocyst removed, and any bronchial openings closed. The pericyst was closed over a 20-French Malecot tube, which was exteriorized and connected to an underwater seal. The tube was removed after 3 weeks by which time a well-established tract had formed. Hospital records of 26 children with 30 HCL who underwent pneumonostomy between 2001 and 2014 were reviewed and followed up. Patients were analyzed in two groups:group1 comprised uncomplicated and group2 complicated HCL. There was a statistically significant difference in the age at presentation in the two groups. The groups were comparable with respect to presenting symptoms, sex ratio, and side or size of cyst. Results Six(20%) children with surgical complications were graded by Clavien-Dindo classification. Three(10%) children qualified as grade 1 and did not require pharmacologic or surgical therapy. Three(10%) children had grade 3 complications; two developed empyema and one pneumothorax. There were no prolonged air leaks. Children with complicated cysts did not require longer hospitalization. Follow-up was possible in 80.76% of the children. The mean duration of follow-up was 21.3 months (interquartile range, 5-63 months). There were no postoperative recurrences or disease-related mortality. Conclusion Pneumonostomy is a safe and effective technique for dealing with the residual cavity in large complicated cysts and bilateral HCL.				
263.	Jehangir, S., Kurian, J. J., Selvarajah, D., Thomas, R. J. and Holland, A. J. A. Recurrent and metastatic congenital mesoblastic nephroma: where does the evidence stand? Pediatr Surg Int; 2017, 33 (11): 1183-1188 **Address:** Department of Paediatric Surgery, The Children's Hospital at Westmead, Sydney Medical School, The University of Sydney, Cnr Hawkesbury Road and Hainsworth Street, Westmead, NSW, 2145, Australia. Department of Pediatric Surgery, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Paediatric Surgery, The Children's Hospital at Westmead, Sydney Medical School, The University of Sydney, Cnr Hawkesbury Road and Hainsworth Street, Westmead, NSW, 2145, Australia. andrew.holland@health.nsw.gov.au. PURPOSE: Fifty years ago, Bolande described Congenital Mesoblastic Nephroma (CMN) as a benign lesion. Unexpected aggressive clinical behaviors prompted a	**INT**	**JUL TO DEC**	**PAEDIATRIC SURGERY**	**PMID:**28856451 **Impact Factor:** 1.181 **H-Index:**51

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	sub-classification based on histology. Recent molecular genetic evidence has identified the aggressive cellular variant to be the renal manifestation of congenital infantile fibrosarcoma. We submit a reappraisal and analysis of the available literature on recurrent and metastatic CMN. METHODS: An electronic search of PubMed, MEDLINE, EMBASE, and Scopus yielded 38 children with local recurrence and/or metastases. RESULTS: Of the 38 children with local recurrence and/or metastasis, 59% were girls. Median time to recurrence was 6 months (range 1-12 months). The commonest sites of metastases were the lung (39%) and liver (29%). Fifty percent of these children died of disease. The outcome of additional chemotherapy (p = 0.5) did not differ from that of surgery alone. The choice of chemotherapy did not influence the outcome (p = 0.6). CONCLUSIONS: Recurrence and metastasis in cellular CMN are much more common than described earlier and carry a high mortality. Children with cellular and mixed CMN require close clinical and radiological follow-up for a minimum of 12 months after primary surgery. Surgery is the mainstay of the treatment of recurrent and metastatic lesions. Neoadjuvant chemotherapy is recommended only if the lesion is inoperable. Targeted therapy may be an option in treatment of refractory cases.				
264.	Jesija, J. S., Gopal, S. and Skiel, H. P. Recurrent Aphthous Stomatitis: An Assessment of Antioxidant Levels in Plasma and Saliva J Clin Diagn Res; 2017, 11 (9): ZC64-ZC67 **Address:** Assistant Professor, Department of Dental and Oral Surgery, **Christian Medical College, Vellore,** Tamil Nadu, India. Professor, Department of Oral Medicine and Radiology, Meenakshi Dental College, Chennai, Tamil Nadu, India. Manager, Department of Development Office, **Christian Medical College, Vellore,** Tamil Nadu, India. Introduction: Recurrent Aphthous Stomatitis (RAS) is a common oral mucosal disorder that affects 20% of the population worldwide. Factors such as trauma, stress, genetic, hypersensitivity, nutrition, immune disturbance and hormonal imbalance may disturb the oxidant and antioxidant balance of an organism and precipitate RAS, but the relationships are poorly understood. Aim: The purpose of this study was to evaluate the antioxidant status in plasma and saliva of patients with RAS. Materials and Methods: Forty patients with RAS and forty healthy	**NAT**	**JUL TO DEC**	**DENTAL AND ORAL SURGERY, DEVELOPMENT OFFICE**	**PMID:**29207836 **PMCID:**5713858 **Impact Factor:**0.650 **H-Index:**18

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	individuals were included in the study. The levels of antioxidants such as Superoxide Dismutase (SOD), Glutathione Peroxidase (GSHPx) Catalase (CAT) and Uric Acid (UA) were measured in plasma and saliva. Statistical analysis was performed to compare the two groups using independent t-test and ANOVA. Results: Decreased SOD levels were observed in plasma amongst RAS patients ($p < 0.03$) whereas, increased levels were observed in their saliva ($p < 0.001$) compared to the control group. A significant difference ($p < 0.001$) was noticed in GSHPx levels: RAS patients exhibited higher levels in plasma but decreased in saliva compared to the control group. CAT activities and UA levels in saliva ($p = 0.015$ and $p < 0.001$ respectively) were observed to be significantly higher in RAS patients. Within the RAS group elevated plasma SOD level ($p < 0.006$) was found in patients with major ulcers whereas, an increased plasma UA ($p < 0.01$) level was observed in patients with minor ulcers. Conclusion: The non-equilibrium antioxidant levels observed in both plasma and saliva indicate the antioxidant status of the body is disturbed in patients with RAS.				
265.	Jiwanmall, M., Joselyn, A. S. and Kandasamy, S. Intravenous clonidine as a part of balanced anaesthesia for controlled hypotension in functional endoscopic sinus surgery: A randomised controled trial Indian J Anaesth; 2017, 61 (5): 418-423 **Address:** Department of Anaesthesia, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Surgical Intensive Care Unit, **Christian Medical College, Vellore,** Tamil Nadu, India. BACKGROUND AND **AIMS:** Controlled hypotension with balanced anaesthesia minimises blood loss. This study was done to evaluate the effectiveness of intravenous clonidine as a single bolus dose to establish controlled hypotension during functional endoscopic sinus surgery (FESS). **METHODS:** This randomised, double-blind, placebo-controlled study was done in a tertiary hospital in India. Sixty American Society of Anesthesiologists physical status I and II patients (18-65 years) undergoing FESS were randomly allocated to one of the two groups. Placebo group (group A, n = 30) received sterile water whereas the clonidine group (group B, n = 30) received 3mug/kg of clonidine intravenously, 30 min prior to induction of anaesthesia. The primary outcome was to achieve a target mean arterial blood	**NAT**	**JAN TO JUN**	**ANAESTHESIA, SURGICAL INTENSIVE CARE UNIT**	**PMID:**28584352 **Impact Factor:**0.400 **H-Index:**17

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	pressure (MAP) of 55-65 mmHg intraoperatively. The secondary outcomes measured were requirement of additional fentanyl and metoprolol, intra-operative blood loss, surgeon's opinion on the surgical field, pain, sedation score and complications requiring treatment. **RESULTS:** Target MAP was easily achieved in clonidine group as against the placebo group (P < 0.001). Significant reduction in intra-operative blood loss (P = 0.0449), a better surgical site scoring (P = 0.02), less requirement of additional hypotensive drugs and good analgesia (P = 0.01) were seen in clonidine group. The complication rates were similar in both the groups. **CONCLUSION:** Clonidine is effective in achieving controlled hypotension in patients undergoing FESS. It reduces intra-operative blood loss, requirement of additional hypotensive drugs, improves the surgical field and offers good analgesia without significant side effects.				
266.	John, D. D., Paul, P., Kujur, E. S., David, S., Jasper, S. and Muliyil, J. Prevalence of Refractive Errors and Number Needed to Screen among Rural High School Children in Southern India: A Cross-sectional Study J Clin Diagn Res; 2017, 11 (8): NC16-NC19 **Address:** Postgraduate Registrar, Department of Ophthalmology, **CMCVellore, Tamil Nadu, India**. Associate Professor, Department of Ophthalmology, **CMC, Vellore,** Tamil Nadu, India. Tutor Incharge, Department of Ophthalmology, **CMC, Vellore,** Tamil Nadu, India. Professor, Department of Ophthalmology, **CMC, Vellore,** Tamil Nadu, India. Professor, Department of Community Health, **CMC, Vellore,** Tamil Nadu, India. INTRODUCTION: Avoidable blindness is mainly due to uncorrected refractive errors (URE). School Eye Screening (SES) can be used as an initiative to address this issue. AIM: To determine prevalence of URE and Number Needed to Screen (NNS) to find one child with low vision or blindness from URE among rural school children. MATERIALS AND METHODS: A cross-sectional study was performed in 22 government schools with sixth to ninth grades in Kaniyambadi block of Vellore District of Tamil Nadu, India. There were 4739 children on the rolls. Among children present, all those identified to have a visual deficit in either eye, using a single line 20/40 Snellen's optotype E chart at 6 m, were referred to the hospital for confirmatory evaluation. Blindness (uncorrected) was defined as inability to see 20/200 in the better eye. In two of these schools, visual deficits were validated through a second school based examination by a clinician. RESULTS: Of the 4739	**NAT**	**JUL TO DEC**	**OPHTHALMOLOGY, COMMUNITY HEALTH**	**PMID:**28969172 **PMCID:**5620813 **Impact Factor:**0.650 **H-Index:**18

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	children on rolls, 601 were absent; all 4138 (87.3%) who were present underwent screening; 2.3% (98) {95% Confidence Interval (CI) 1.8 to 2.8} failed the screening test in at least one eye and were referred for examination. Only 28 (28.6%) of 98 children who were referred came for examination to the hospital. In the 2 of the 22 schools where the visual deficit was validated, there were no false positives. The prevalence of refractive error in these two schools was 2.2% (95% CI 1.7 - 2.7). NNS to detect one child with low vision or blindness from URE was 147. CONCLUSION: Magnitude of refractive error, low NNS, low response to referral necessitates complete care at school and hence a relook at the current SES program.				
267.	John, D., Selvin, S. S. T., Irodi, A. and Jacob, P. Disseminated Rhinosporidiosis with Conjunctival Involvement in an Immunocompromised Patient Middle East Afr J Ophthalmol; 2017, 24 (1): 51-53 **Address:** Department of Ophthalmology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Radiodiagnosis, **Christian Medical College, Vellore,** Tamil Nadu, India. Rhinosporidiosis is a granulomatous infection of mucocutaneous tissue caused by Rhinosporidium seeberi that most commonly occurs in the nasal cavity. Ocular rhinosporidiosis affects primarily the conjunctiva. Diagnosis of rhinosporidiosis is based on strong clinical suspicion and is confirmed by histopathological examination. We report a rare case of conjunctival rhinosporidiosis in an immunocompromised patient (human immunodeficiency virus) with disseminated cutaneous rhinosporidiosis. A 44-year-old male presented with a swelling in the right upper eyelid for 6 months. Excision biopsy of the ocular lesion showed multiple thick-walled, variable-sized sporangia containing endospores within the subepithelium suggestive of rhinosporidiosis. A multidrug regimen of systemic cycloserine, ketoconazole, and dapsone was administered to treat disseminated rhinosporidiosis, in addition to antiretroviral therapy. There was good response with reduction in the swellings.	**INT**	**JAN TO JUN**	**OPHTHALMOLOGY, RADIODIAGNOSIS**	**PMID:**28546693 **Impact Factor:**1.080 **H-Index:**14
268.	John, J., Giri, S., Karthikeyan, A. S., Lata, D., Jeyapaul, S., Rajan, A. K., Kumar, N., Dhanapal, P., Venkatesan, J., Mani, M., Hanusha, J., Raman, U., Moses, P. D.,	**INT**	**JAN TO JUN**	**CLINICAL VIROLOGY**	**PMID:**28003352 **Impact Factor:**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Abraham, A., Bahl, S., Bandyopadhyay, A. S., Ahmad, M., Grassly, N. C. and Kang, G. The Duration of Intestinal Immunity After an Inactivated Poliovirus Vaccine Booster Dose in Children Immunized With Oral Vaccine: A Randomized Controlled Trial J Infect Dis; 2017, 215 (4): 529-536 **Address:** Department of Community Health. Division of Gastrointestinal Sciences, and. Department of Clinical Virology, **Christian Medical College, Vellore,** Tamil Nadu, and. WHO Regional Office for South-East Asia, New Delhi, India. Bill & Melinda Gates Foundation, Seattle, Washington. WHO Country Office, New Delhi, India; and. Department of Infectious Disease Epidemiology, Imperial College London, United Kingdom. **Background:** In 2014, 2 studies showed that inactivated poliovirus vaccine (IPV) boosts intestinal immunity in children previously immunized with oral poliovirus vaccine (OPV). As a result, IPV was introduced in mass campaigns to help achieve polio eradication. Methods.: We conducted an open-label, randomized, controlled trial to assess the duration of the boost in intestinal immunity following a dose of IPV given to OPV-immunized children. Nine hundred healthy children in Vellore, India, aged 1-4 years were randomized (1:1:1) to receive IPV at 5 months (arm A), at enrollment (arm B), or no vaccine (arm C). The primary outcome was poliovirus shedding in stool 7 days after bivalent OPV challenge at 11 months. Results.: For children in arms A, B, and C, 284 (94.7%), 297 (99.0%), and 296 (98.7%), respectively, were eligible for primary per-protocol analysis. Poliovirus shedding 7 days after challenge was less prevalent in arms A and B compared with C (24.6%, 25.6%, and 36.4%, respectively; risk ratio 0.68 [95% confidence interval: 0.53-0.87] for A versus C, and 0.70 [0.55-0.90] for B versus C). Conclusions.: Protection against poliovirus remained elevated 6 and 11 months after an IPV boost, although at a lower level than reported at 1 month. Clinical Trials Registration.: CTRI/2014/09/004979.				6.273 **H-Index:**220
269.	John, R. A., Keshava, S. N. and Danda, D. Correlating MRI with clinical evaluation in the assessment of disease activity of Takayasu's arteritis Int J Rheum Dis; 2017, 20 (7): 882-886	**INT**	**JUL TO DEC**	**RADIODIAGNOSIS, CLINICAL IMMUNOLOGY AND**	**PMID:**28736969 **Impact Factor:** 2.624 **H-Index:**27

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Department of Radiodiagnosis, **Christian Medical College Hospital, Vellore,** Tamil Nadu, India. Department of Clinical Immunology and Rheumatology, **Christian Medical College Hospital, Vellore,** Tamil Nadu, India. OBJECTIVES: To correlate magnetic resonance imaging (MRI) assessment of disease activity in patients with Takayasu's arteritis with the Indian Takayasu's activity score (ITAS). DESIGN, MATERIALS AND METHODS: We prospectively assessed 20 patients with Takayasu's arteritis from November 2010 to September 2011. RESULTS: We found a statistically significant association between MRI assessment of disease activity and ITAS with a P-value of 0.01. The MRI features suggesting active disease included wall thickening and enhancement. We also analyzed the association between MRI and clinical assessment which was also statistically significant at P = 0.037. CONCLUSION: Our study suggests that there is an association between MRI assessment of disease activity and the ITAS. MRI evaluation of disease activity of Takayasu's arteritis therefore goes hand in hand with ITAS 2010, ITAS - A, erythrocyte sedimentation rate and C-reactive protein. However this needs further investigation from future studies using serial assessments.			**RHEUMATOLOGY**	
270.	John, R., Kurian, J., Mathew, L. G. and Sen, S. Clinical Outcomes of Children with Wilms Tumor Treated on a Modified SIOP WT 2001 PROTOCOL and Comparison with A Historic Cohort Treated with Upfront Surgery Pediatric Blood & Cancer; 2017, 64 S247-S247	**INT**	**JUL TO DEC**	**HAEMATOLOGY**	**NO PMID** **WOS:**000408978202274 **Impact Factor:** 2.513 **H-Index:**85
271.	John, S., Moorthy, R. K., Sebastian, T. and Rajshekhar, V. Evaluation of hand function in healthy individuals and patients undergoing uninstrumented central corpectomy for cervical spondylotic myelopathy using nine-hole peg test Neurol India; 2017, 65 (5): 1025-1030 **Address:** Department of Neurological Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JUL TO DEC**	**NEUROLOGICAL SCIENCES, BIOSTATISTICS**	**PMID:**28879890 **Impact Factor:** 1.758 **H-Index:**39

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	OBJECTIVES: To evaluate the hand function in healthy individuals and in patients with cervical spondylotic myelopathy (CSM) undergoing central corpectomy using the nine-hole peg test (NHPT). MATERIALS AND METHODS: The NHPT was performed in healthy adults and in patients with CSM; overall, five trials were performed in the right and left hand separately. The preoperative and follow up NHPT score was compared to the normal and correlated with Nurick and modified Japanese Orthopedic Association (mJOA) scales. RESULTS: The NHPT score was significantly less in adult healthy female compared to adult healthy male subjects (difference, 0.71 s, $P < 0.002$). The distribution of the NHPT scores in normal adults followed the normal binomial distribution. The time taken to perform the NHPT with the right hand was significantly lower than the time taken to perform the NHPT with the left hand in both the sexes ($P < 0.001$). Thirty-six of the 47 patients with CSM (76.6%) had a prolonged preoperative NHPT score. There was a strong negative correlation between the preoperative NHPT score and the preoperative upper limb component of the modified-Japanese Orthopedic Association (UlmJOA) score. No significant change was detected in the NHPT score at one week postoperatively. On follow-up at six months or more ($n = 21$), the NHPT score normalized in five (35.7%) of the 14 patients in whom it was prolonged preoperatively. The NHPT score remained the same as the preoperative status in the other 16 patients, 7 of whom had a normal score preoperatively. The change in the NHPT score at follow-up did not correlate with the change in the UlmJOA score. CONCLUSIONS: Normative data among the Indian population suggest that female subjects have significantly lower scores than the male ones, and that there is a difference between the two sides that needs to be considered while reporting the NHPT scores in disease. The NHPT scores were prolonged preoperatively in CSM and showed a correlation with the UlmJOA score, and there was no significant change noted at one week follow-up. While the NHPT score is a good quantitative test to evaluate hand function in patients with CSM and could detect subtle hand dysfunction preoperatively, it has a limited role, when used alone, to detect changes in hand function postoperatively.				
272.	John, T. J. Exploration of Association between Litchi Consumption and Seasonal Acute Encephalopathy Syndrome: Pediatric Infectious Disease Specialist's Viewpoint Indian Pediatr; 2017, 54 (4): 323-325	**NAT**	**JUL TO DEC**	**CLINICAL VIROLOGY**	**PMID:**28474592 **Impact Factor:** 1.152 **H-Index:**41

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: (Member, Bihar Team; and Member, ICMR Task Force on Acute Encephalitis Syndrome/ Japanese Encephalitis)Vellore, Tamilnadu, India. tjacobjohn@yahoo.co.in.				
273.	John, T. J., Jain, Y., Nadimpally, S. and Jesani, A. Vaccine delivery to disease control: a paradigm shift in health policy Indian J Med Ethics; 2017, 2 (2): 112-115 **Address:** Emeritus Professor of Virology, **Christian Medical College, Vellore,** India. tjacobjohn@yahoo.co.in Paediatrician, Jan Swasthya Sahyog, Ganiyari PO, Bilaspur District, Chhattisgarh 495 112, India,. yogeshjain.jssbilaspur@gmail.com. Sama-Resource Group for Women and Health, B 45, Shivalik Main, Malviya Nagar, New Delhi 110 017, India,. sarojinipr@gmail.com Independent Consultant Researcher and Teacher, Bioethics and Public Health, Prabhu Darshan, 31, Swatantrya Sainik Nagar, Andheri West, Mumbai 400 058, India,. amar.jesani@gmail.com India's Universal Immunisation Programme (UIP) has resulted in the creation of infrastructure, human resources and systems for the procurement and delivery of vaccines. Recently, new vaccines have been added and there are plans for the introduction of more. However, the outcomes in terms of reduction of the diseases for which the vaccines are being administered remain ambiguous. This is evident from the persistent health issues that children continue to experience, despite immunisation. This situation raises a fundamental ethical question for public health: vaccinations are one of the tools of disease control, but are they properly aligned to the control of disease so as to produce the expected public health utility or benefit?	**NAT**	**JAN TO JUN**	**CLINICAL VIROLOGY**	**PMID:**28512077 **Impact Factor:**0.490 **H-Index:**12
274.	John, T. J., Verghese, V. P., Arunkumar, G., Gupta, N. and Swaminathan, S. The syndrome of acute encephalitis in children in India: Need for new thinking Indian J Med Res; 2017, 146 (2): 158-161 **Address:** 439 Civil Supplies Godown Lane, Kamalakshipuram, Vellore, India. Department of Child Health/Pediatrics, **Christian Medical College, Vellore,** India. Manipal Centre for Virus Research, Manipal University, Manipal, India. Epidemiology & Communicable Diseases Division, Indian Council of Medical Research, New Delhi, India.	**NAT**	**JUL TO DEC**	**CLINICAL VIROLOGY**	**PMID:**29265016 **Impact Factor:** 1.532 **H-Index:**68

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Health Research, Indian Council of Medical Research, New Delhi, India.				
275.	Jonathan, G. E., Nair, B. R., Joseph, V., Mani, S. and Chacko, G. Lumbar extradural arteriovenous malformation mimicking a schwannoma in a child: Rare presentation of neurofibromatosis type-1 Neurol India; 2017, 65 (4): 900-902 **Address:** Department of Neurological Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Radiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Neuropathology, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JUL TO DEC**	**NEUROLOGICAL SCIENCES**	**PMID:**28681780 **Impact Factor:** 1.758 **H-Index:**39
276.	Jones, P. C., Pendergast, L. L., Schaefer, B. A., Rasheed, M., Svensen, E., Scharf, R., Shrestha, R., Maphula, A., Roshan, R., Rasmussen, Z., Seidman, J. C. and Murray-Kolb, L. E. Measuring home environments across cultures: Invariance of the HOME scale across eight international sites from the MAL-ED study J Sch Psychol; 2017, 64 109-127 **Address:** Temple University, Philadelphia, PA, USA. Electronic address: paul.c.jones@me.com. Temple University, Philadelphia, PA, USA. The Pennsylvania State University, State College, PA, USA. Aga Khan University, Pakistan. University of Bergen, Norway; Haydom Lutheran Hospital, Tanzania. University of Virginia. Institute of Medicine, Tribuhvan University, Kathmandu, Nepal. University of Venda, South Africa. **Christian Medical College, Vellore,** India. Fogarty International Center/National Institutes of Health, Bethesda, MD, USA. The home environment provides the context for much of a child's early development. Examples of important aspects of the home environment include safety, cleanliness, and opportunities for cognitive stimulation. This study sought to examine the psychometric properties of an adapted form of the Home	**INT**	**JUL TO DEC**	**COMMUNITY HEALTH**	**PMID:**28735604 **PMCID:**5540057 **Impact Factor:** 3.000 **H-Index:**72

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Observation for the Measurement of the Environment (HOME; Caldwell & Bradley, 1984, 2003) across the eight international sites of the MAL-ED project (Dhaka, Bangladesh; Vellore, India; Bhakatapur, Nepal; Naushahro Feroze, Pakistan; Fortaleza, Brazil; Loreto, Peru; Venda, South Africa; Haydom, Tanzania), to identify a factor structure that fit the data at all sites, and to derive a subset of items that could be used to examine home environmental characteristics across sites. A three-factor structure (i.e., Emotional and Verbal Responsivity; Clean and Safe Environment; Child Cleanliness) was identified, and partial measurement equivalence/invariance across sites was supported. Overall, these findings lend support for the use of portions of this abbreviated and adapted version of the HOME for use among heterogeneous, cross-cultural groups in low- and middle-income nations.				
277.	Jose, J., Sulimov, D. S., El-Mawardy, M., Sato, T., Allali, A., Holy, E. W., Becker, B., Landt, M., Kebernik, J., Schwarz, B., Richardt, G. and Abdel-Wahab, M. Clinical Bioprosthetic Heart Valve Thrombosis After Transcatheter Aortic Valve Replacement: Incidence, Characteristics, and Treatment Outcomes JACC Cardiovasc Interv; 2017, 10 (7): 686-697 **Address:** Heart Center, Segeberger Kliniken (Academic Teaching Hospital of the Universities of Kiel, Lubeck, and Hamburg), Bad Segeberg, Germany; **Christian Medical College Hospital, Vellore,** Tamil Nadu, India. Heart Center, Segeberger Kliniken (Academic Teaching Hospital of the Universities of Kiel, Lubeck, and Hamburg), Bad Segeberg, Germany. Heart Center, Segeberger Kliniken (Academic Teaching Hospital of the Universities of Kiel, Lubeck, and Hamburg), Bad Segeberg, Germany; Tachikawa General Hospital, Nagaoka, Japan. Heart Center, Segeberger Kliniken (Academic Teaching Hospital of the Universities of Kiel, Lubeck, and Hamburg), Bad Segeberg, Germany. Electronic **Address:** mohamed.abdel-wahab@segebergerkliniken.de. **OBJECTIVES:** The aim of this study was to determine the incidence, characteristics, and treatment outcomes of patients diagnosed with clinical transcatheter heart valve thrombosis. **BACKGROUND:** Limited data exists on clinical or manifest transcatheter heart valve thrombosis. Prior studies have focused on subclinical thrombosis. **METHODS:** A retrospective analysis was	**INT**	**JAN TO JUN**	**CARDIOLOGY**	**PMID:**28385406 **Impact Factor:**8.841 **H-Index:**89

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	conducted of prospectively collected data from a single-center registry that included 642 consecutive patients who underwent transcatheter aortic valve replacement between 2007 and 2015 (305 patients had self-expanding valves; balloon-expandable, n = 281; mechanically expanding, n = 56). Long-term oral anticoagulation (OAC) was indicated in 261 patients, while 377 patients received dual-antiplatelet therapy post-procedure. All patients underwent scheduled clinical and echocardiographic follow-up. **RESULTS:** The overall incidence of clinical valve thrombosis was 2.8% (n = 18). No patient on OAC developed thrombosis. Of the detected thrombosis cases, 13 patients had balloon-expandable, 3 had self-expanding, and 2 had mechanically expanding valves. Thrombosis occurred significantly more often with balloon-expandable valves (odds ratio: 3.45; 95% confidence interval: 1.22 to 9.81; p = 0.01) and following valve-in-valve procedures (odds ratio: 5.93; 95% confidence interval: 2.01 to 17.51; p = 0.005). Median time to diagnosis of valve thrombosis was 181 days. The median N-terminal pro-brain natriuretic peptide level was 1,318 pg/ml (interquartile range: 606 to 1,676 pg/ml). The mean transvalvular gradient and valve area were 34 +/- 14 mm Hg and 1.0 +/- 0.46 cm2, respectively. Computed tomography showed hypoattenuating areas with reduced leaflet motion. Initiation of OAC resulted in significant reduction of transvalvular gradient and clinical improvement. No deaths were related to valve thrombosis. **CONCLUSIONS:** Clinical transcatheter heart valve thrombosis is more common than previously considered, characterized by imaging abnormalities and increased gradients and N-terminal pro-brain natriuretic peptide levels. It occurred more commonly after balloon-expandable transcatheter aortic valve replacement and valve-in-valve procedures. OAC appeared to be effective in the prevention and treatment of valve thrombosis. Randomized control trials are needed to define optimal antithrombotic therapy after transcatheter aortic valve replacement.				
278.	Jose, N., Perla, H. T., Iyadurai, R. and Chacko, G. Leptomeningeal carcinomatosis in a patient with gallbladder carcinoma J Cytol; 2017, 34 (2): 118-121 **Address:** Department of General Medicine, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Pathology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India.	**INT**	**JAN TO JUN**	**GENERAL MEDICINE, PATHOLOGY**	**PMID:**28469324 **Impact Factor:** 0.476 **H-Index:**12

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Carcinomatous meningitis is a rare manifestation of malignancy. It is increasingly being recognized in lung carcinoma, breast carcinoma, melanomas, gastrointestinal malignancies, lymphomas, and leukemia and it is almost never seen in gallbladder malignancies. We present a case whose primary presentation was as a carcinomatous meningitis that was subsequently found to be secondary to a gallbladder primary.				
279.	Jose, R., Chakravarthy, K., Nair, S., Joseph, M., Jeyaseelan, V. and Korula, G. A Randomized Controlled Trial Studying the Role of Dexamethasone in Scalp Nerve Blocks for Supratentorial Craniotomy J Neurosurg Anesthesiol; 2017, 29 (2): 150-156 **Address:** Departments of *Anaesthesiology daggerNeurological Sciences, Neuro Intensive Care Division double daggerBiostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India. **BACKGROUND:** The aim of this double-blinded randomized control study was to examine the role of the steroid dexamethasone as an adjuvant to lignocaine and ropivacaine in scalp nerve blocks in adults undergoing supratentorial craniotomy under general anesthesia. We compared the intraoperative anesthetic and postoperative analgesic requirement with and without the addition of dexamethasone to the local anesthetics. **METHODS:** The consented 90 patients were randomized into 2 groups: one group received 8 mg (2 mL) of dexamethasone, whereas the other received 2 mL of normal saline along with the local anesthetics in the scalp nerve block administered soon after induction of general anesthesia. All patients received oral/intravenous dexamethasone perioperatively to decrease cerebral edema. The general anesthetic technique for induction, maintenance, and recovery was standardized in the 2 groups. The primary outcome assessed was the time to administration of the first dose of analgesic postoperatively. The secondary outcomes included intraoperative opioid requirement, time to emergence, and incidence of postoperative nausea and vomiting. **RESULTS:** There was no significant difference between the dexamethasone and saline groups with respect to time to first analgesic requirement, intraoperative fentanyl requirements, time to emergence from general anesthesia, and incidence of postoperative nausea and vomiting. **CONCLUSIONS:** Addition of dexamethasone as an adjuvant to local anesthetics in	**INT**	**JAN TO JUN**	**ANAESTHESIOLOGY, NEUROLOGICAL SCIENCES, NEURO INTENSIVE CARE, BIOSTATISTICS**	**PMID:**26756502 **Impact Factor:** 3.925 **H-Index:**52

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	scalp nerve blocks in the setting of perioperative steroid therapy does not appear to provide any additional benefit with respect to prolongation of the duration of the block.				
280.	Joseph M.1, Kapoor N.1, Ramasamy S.2, Jiwanmal S.A.1, Kattula D.1, Abraham V.1, Samarasam I.1, Paul T.1, Thomas N.1 Nutritional profile of the morbidly obese patients attending a bariatric clinic in a South Indian Tertiary Care Centre. Obesity and metabolism Obesity and metabolism doi: 10.14341/OMET2017241-47. 2017 **Address:** 1.**Christian Medical College & Hospital, Vellore,** Tamil Nadu, India 2.Weill Cornell Medicine, New York, United States Background: Obesity is sweeping across continents and is a major public health concern of the modern society. Aims: The main objective of this study was to study the demographic, anthropometric and dietary patterns of the morbidly obese and study region wise variation in their nutrient intake. Materials and Methods: The study was conducted on 101 morbidly obese individuals from different regions of India who attended the Bariatric clinic of a tertiary care hospital in India. Their socio-demographic details, anthropometric measurements were collected. The dietary assessment was done using a 24 hour dietary recall and a food frequency questionnaire. The study was approved by the Institutional review board and informed consent was obtained from them. Results: More than 3/4th of the patients were females and 61 per cent had Type 2 diabetes mellitus. The mean age of the male and female population was 41.3 + 15.5 years and 36.7 + 11.9 years respectively. Their mean BMI was 41kg/m2. The mean daily intake of calories was more than 2200kcal/day with a gross deficit in the intake of micronutrients. Bonferroni Test showed that there was region wise variation in dietary intake, South Indian female population had the lowest intake of the micronutrients and those from East India had the high-Пищевой профиль пациентов с морбидным ожирением, находящихся на лечении в Центре высокотехнологичной медицинской помощи Южной ИндииDOI: 10.14341/OMET2017241-47Ожирение и метаболизм. 2017;14(2):41-47	**INT**	**JUL TO DEC**	**PSYCHIATRY ENDOCRINOLOGY**	**IMPACT FACTOR:**0.74
281.	Joseph, G. and Canaud, L. Commentary: Combining Ascending Aorta and Aortic Arch TEVAR	**INT**	**JAN TO JUN**	**CARDIOLOGY**	**PMID:**27974602 **Impact Factor:** 2.838

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	J Endovasc Ther; 2017, 24 (1): 81-83 **Address:** 1 Department of Cardiology, **Christian Medical College, Vellore,** India. 2 Service de Chirurgie Vasculaire et Thoracique, Hopital A de Villeneuve, Montpellier, France.				**H-Index:**89
282.	Joseph, G. and Lonn, L. Commentary: Emergent TAVR During TEVAR J Endovasc Ther; 2017, 24 (5): 661-664 **Address:** 1 Department of Cardiology, **Christian Medical College, Vellore,** Tamil Nadu, India. 2 Department of Cardiovascular Radiology, Faculty of Health Sciences, The National Hospital and University of Copenhagen, Denmark.	**INT**	**JUL TO DEC**	**CARDIOLOGY**	**PMID:**28795640 **Impact Factor:** 2.838 **H-Index:**89
283.	Joseph, G., Chacko, S. T., Joseph, E. and Chandra Kumar, V. Percutaneous Palliation of Right Ventricular Outflow Tract Obstruction Caused by Metastatic Malignancy JACC Cardiovasc Interv; 2017, 10 (8): e79-e80 **Address:** Department of Cardiology, **Christian Medical College, Vellore,** India. Electronic **Address:** joseph59@gmail.com Department of Cardiology, **Christian Medical College, Vellore,** India. Department of Radiology, **Christian Medical College, Vellore,** India. Department of Pathology, **Christian Medical College, Vellore,** India.	**INT**	**JAN TO JUN**	**CARDIOLOGY, RADIOLOGY, PATHOLOGY**	**PMID:**28365263 **Impact Factor:** 8.841 **H-Index:**89
284.	Joseph, I. M., Kuriakose, C. K., Dev, A. V. and Philip, G. A. Low dose versus high dose anti-snake venom therapy in the treatment of haematotoxic snake bite in South India Trop Doct; 2017, 49475517712804 **Address:** 1 DNB General Medicine Senior Resident, Dr Somervell Memorial CSI Medical College, Karakonam, Thiruvananthapuram, Kerala, India. 2 DNB General Medicine Assistant Professor, **Christian Medical College and**	**INT**	**JAN TO JUN**	**GENERAL MEDICINE**	**PMID:**28592212 **Impact Factor:** 0.450 **H-Index:**28

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Hospital, Vellore, Tamil Nadu, India. 3 DNB General Medicine Postgraduate Registrar, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. 4 DNB General Medicine Senior Consultant, Christian Fellowship Hospital, Oddanchatram, Tamil Nadu, India. Most of the studies on the appropriate dose of anti-snake venom (ASV) are from tertiary hospitals and the guidelines are unclear. Our observational study compared the outcomes of two prevalent treatment regimes for haematotoxic snake bite in a secondary care hospital in South India. The time to normalisation of whole blood clotting time, mortality and complications were not different between the groups. The average dose of ASV required in the low and high dose groups were 106 mL and 246 mL, respectively. Consequently, patients who received low dose ASV incurred approximately 50% less expense. Urticarial rashes were also significantly fewer in the low dose group.				
285.	Joseph, M., Dasgupta, R., Ramachandran, R., Anoop, S., Anand, V., Devanithi, N., Asha, H. S. and Thomas, N. Nutritional intake in low body mass index (BMI) males with type 1 diabetes and fibrocalcific pancreatic diabetes: What are the unmet needs? A cross-sectional study from a south Indian tertiary care hospital Journal of Clinical and Diagnostic Research; 2017, 11 (10): OC06-OC09 **Address:** Department of Endocrinology, **CMC Vellore,** Vellore, TN, India Introduction: There is paucity of data on the nutritional intake in low Body Mass Index (BMI) Asian Indians with diabetes. Aim: To study the difference in the nutrient intake pattern in low-BMI Type 1 Diabetes Mellitus (T1DM) and Fibrocalcific Pancreatic Diabetes (FCPD) patients. Materials and Methods: This cross-sectional study consisted of T1DM (n=40) and FCPD patients (n=20) male patients with similar BMI. Nutritional data was collected using the 24 hour recall method and food diaries. Fasting blood samples were analysed for lipid profile, serum creatinine, glycosylated haemoglobin, albumin, calcium and vitamin D. Stool samples were analysed for pancreatic elastase. Percentage analysis, Independent sample t-test and Pearson coefficient correlation were used to analyse the data. A p-value<0.05 was considered as statistically significant. Results: The FCPD patients, on biochemical analysis, had a significantly lower vitamin D levels compared to the TIDM group (p=0.035). However, haemoglobin, triglycerides, low	**NAT**	**JUL TO DEC**	**ENDOCRINOLOGY**	**NO PMID** **NO PMCID** **SCOPUS** **Impact Factor:**0.650 **H-Index:**18

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	density lipoproteins, creatinine, albumin and calcium were similar between the groups. In the nutrient data, FCPD patients had a significant higher intake of fat (p=0.039), fibre (p<0.001), calcium (p=0.047), phosphorous (p=0.035), and niacin (p=0.001) and calories from fat (p=0.047). The TIDM group had a significantly higher intake of thiamine (p=0.047) and carbohydrates (p=0.014). Conclusion: TIDM and FCPD groups have similar dietary pattern deficit in fibre, calories, macronutrients and micronutrients. Malabsorption and poor glycaemic control in FCPD patients can be attributed to a higher dietary fat intake. A balanced diet can ensure better glycaemic control.				
286.	Joseph, M., Gupta, R. D., Prema, L., Inbakumari, M. and Thomas, N. Are Predictive Equations for Estimating Resting Energy Expenditure Accurate in Asian Indian Male Weightlifters? Indian J Endocrinol Metab; 2017, 21 (4): 515-519 **Address:** Department of Home Science, Government College for Women, Thiruvananthapuram, Kerala, India. Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Nutrition, Kerala Agricultural University, Thiruvananthapuram, Kerala, India. BACKGROUND: The accuracy of existing predictive equations to determine the resting energy expenditure (REE) of professional weightlifters remains scarcely studied. Our study aimed at assessing the REE of male Asian Indian weightlifters with indirect calorimetry and to compare the measured REE (mREE) with published equations. A new equation using potential anthropometric variables to predict REE was also evaluated. MATERIALS AND METHODS: REE was measured on 30 male professional weightlifters aged between 17 and 28 years using indirect calorimetry and compared with the eight formulas predicted by Harris-Benedicts, Mifflin-St. Jeor, FAO/WHO/UNU, ICMR, Cunninghams, Owen, Katch-McArdle, and Nelson. Pearson correlation coefficient, intraclass correlation coefficient, and multiple linear regression analysis were carried out to study the agreement between the different methods, association with anthropometric variables, and to formulate a new prediction equation for this population. RESULTS: Pearson correlation coefficients between mREE and the anthropometric variables showed positive significance with	**NAT**	**JUL TO DEC**	**ENDOCRINOLOGY**	**PMID:**28670532 **PMCID:**5477436 **Impact Factor:**NA **H-Index:**7

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	suprailiac skinfold thickness, lean body mass (LBM), waist circumference, hip circumference, bone mineral mass, and body mass. All eight predictive equations underestimated the REE of the weightlifters when compared with the mREE. The highest mean difference was 636 kcal/day (Owen, 1986) and the lowest difference was 375 kcal/day (Cunninghams, 1980). Multiple linear regression done stepwise showed that LBM was the only significant determinant of REE in this group of sportspersons. A new equation using LBM as the independent variable for calculating REE was computed. REE for weightlifters = -164.065 + 0.039 (LBM) (confidence interval -1122.984, 794.854]. This new equation reduced the mean difference with mREE by 2.36 + 369.15 kcal/day (standard error = 67.40). CONCLUSION: The significant finding of this study was that all the prediction equations underestimated the REE. The LBM was the sole determinant of REE in this population. In the absence of indirect calorimetry, the REE equation developed by us using LBM is a better predictor for calculating REE of professional male weightlifters of this region.				
287.	Joseph, Mini, Shyamasunder, Asha Hesarghatta, Mammen, Priya and Thomas, Nihal Type 1 diabetes mellitus and eating disorders International Journal of Diabetes in Developing Countries; 2017, 37 (4): 502-506 The choice of type and quantity of food is vital to achieving glycaemic control in diabetes, more so in type 1 diabetes mellitus. The attention to detail could however reach a level of obsession of an eating disorder and thereby have a negative impact on glycaemic control. We conducted a study to see if there was a risk of developing eating disorders among adolescent, young and middle-aged adults with type 1 diabetes mellitus and whether it has an association with HbA(1)C levels. A cross-sectional study was conducted on 113 type 1 diabetes mellitus patients and age-gender-matched healthy controls. The two groups were screened using the Eating Attitude Test-26 (EAT-26) questionnaire. EAT-26 identified type 1 diabetes as having a high risk for developing eating disorder when compared to those without diabetes (OR = 38.5 with 95% CI 8.7, 170.7; p < 0.001). The risk of developing eating disorder increased with the duration of diabetes. There was no significant difference in the risk between males and females. The risk of developing eating disorder did not correlate with glycaemic control. EAT-26 identified subjects with type 1 diabetes as high risk for developing eating disorder in comparison to	**INT**	**JUL TO DEC**	**ENDOCRINOLOGY**	**NO PMID** **WOS:**000414339400017 **Impact Factor:** 0.366 **H-Index:**20

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	those without diabetes. In our setting, this did not reflect on poor glycaemic control.				
288.	Joseph, S., Janakiraman, R., Chacko, G., Jayaraj, R., Thomas, M. and Mukhopadhyay, S. Predictability of Recurrence using Immunohistochemistry to delineate Surgical Margins in mucosal Head and Neck Squamous Cell Carcinoma (PRISM-HNSCC): study protocol for a prospective, observational and bilateral study in Australia and India BMJ Open; 2017, 7 (10): e014824 **Address:** Northern Territory Medical Program, Centre for Remote Health, Flinders University, Alice Springs, Northern Territory, Australia. Engineering, Health, Science and the Environment, Charles Darwin University, Alice Springs, Northern Territory, Australia. Department of Surgery, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Pathology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Faculty of Engineering, Health, Science and the Environment, Charles Darwin University, Darwin, Northern Territory, Australia. Department of Maxillofacial Surgery, Royal Darwin Hospital, Tiwi, Northern Territory, Australia. OBJECTIVES: Treatment failure and poor 5-year survival in mucosal head and neck squamous cell carcinoma (HNSCC) has remained unchanged for decades mainly due to advanced stage of presentation and high rates of recurrence. Incomplete surgical removal of the tumour, attributed to lack of reliable methods to delineate the surgical margins, is a major cause of disease recurrence. The predictability of recurrence using immunohistochemistry (IHC) to delineate surgical margins (PRISM) in mucosal HNSCC study aims to redefine margin status by identifying the true extent of the tumour at the molecular level by performing IHC with molecular markers, eukaryotic initiation factor, eIF4Eand tumour suppressor gene, p53, on the surgical margins and test the use of Lugol's iodine and fluorescence visualisation prior to the wide local excision. This article describes the study protocol at its pre - results stage. METHODS AND ANALYSIS: PRISM-HNSCC is a bilateral observational research being conducted in Darwin, Australia and Vellore,	**INT**	**JUL TO DEC**	**SURGERY, PATHOLOGY**	**PMID:**29038175 **PMCID:**5652552 **Impact Factor:**2.369 **H-Index:**47

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	India. Individuals diagnosed with HNSCC will undergo the routine wide local excision of the tumour followed by histopathological assessment. Tumours with clear surgical margins that satisfy the exclusion criteria will be selected for further staining of the margins with eIF4E and p53 antibodies. Results of IHC staining will be correlated with recurrences in an attempt to predict the risk of disease recurrence. Patients in Darwin will undergo intraoperative staining of the lesion with Lugol's iodine and fluorescence visualisation to delineate the excision margins while patients in Vellore will not undertake these tests. The outcomes will be analysed. ETHICS AND DISSEMINATION: The PRISM-HNSCC study was approved by the institutional ethics committees in Darwin (Human Research Ethics Committee 13-2036) and Vellore (Institutional Review Board Min. no. 8967). Outcomes will be disseminated through publications in academic journals and presentations at educational meetings and conferences. It will be presented as dissertation at the Charles Darwin University. We will communicate the study results to both participating sites. Participating sites will communicate results with patients who have indicated an interest in knowing the results. TRIAL REGISTRATION NUMBER: Australian New Zealand Clinical Trials Registry (ACTRN12616000715471).				
289.	Joshi, A., Kumar, M., Arun, S. and Sheshrao, M. M. A rare cause of early neonatal cyanosis: absent right pulmonary artery BMJ Case Rep; 2017, 2017 **Address:** Department of Neonatology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Neonatology, **Christian Medical College, Vellore,** Tamilnadu, India. Department of Radiology, **Christian Medical College, Vellore,** Tamilnadu, India. Unilateral absent right pulmonary artery is a rare developmental anomaly that usually presents in late childhood and adolescence as recurrent respiratory tract infections, dyspnoea and haemoptysis. We report a case of a 2-day-old baby with respiratory distress and differential cyanosis. Echocardiogram showed pulmonary hypertension with absent right pulmonary artery. The findings were confirmed by CT angiogram. The baby improved with pulmonary vasodilators and antifailure medications.	**INT**	**JUL TO DEC**	**NEONATOLOGY, RADIOLOGY**	**PMID:**28794091 **Impact Factor:**NA **H-Index:**11
290.	Joy, D. S., Manoranjitham, S. D., Samuel, P. and Jacob, K. S. Explanatory models and distress in primary caregivers of patients with acute psychotic presentations: A study from South India	**INT**	**JUL TO DEC**	**PSYCHIATRY NURSING, BIOSTATISTI**	**PMID:**28758522 **Impact Factor:** 1.380

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Int J Soc Psychiatry; 2017, 63 (7): 563-568 **Address:** 1 Department of Psychiatric Nursing, College of Nursing, **Christian Medical College, Vellore,** Vellore, India. 2 Department of Biostatistics, **Christian Medical College, Vellore,** Vellore, India. 3 Department of Psychiatry, **Christian Medical College, Vellore,** Vellore, India. BACKGROUND: Emotional distress among caregivers of people with mental illness is common, changes overtime and requires appropriate coping strategies to prevent long-term disability. Explanatory models, which underpin understanding of disease and illness, are crucial to coping. AIM: To study the association of explanatory models and distress among caregivers of people with acute psychotic illness. METHOD: A total of 60 consecutive patients and their primary caregivers who presented to the Department of Psychiatry, **Christian Medical College, Vellore,** were recruited for the study. Positive and Negative Syndrome Scale (PANSS), Short Explanatory Model Interview (SEMI) and the General Health Questionnaire-12 (GHQ-12) were used to assess severity of psychosis, explanatory models of illness and emotional distress. Standard bivariate and multivariable statistics were employed. RESULTS: Majority of the caregivers simultaneously held multiple models of illness, which included medical and non-medical perspectives. The GHQ-12 score were significantly lower in people who held multiple explanatory models of illness when compared to the caregivers who believed single explanations. CONCLUSION: Explanatory models affect coping in caregivers of patients with acute psychotic presentations. There is a need to have a broad-based approach to recovery and care.			**CS, PSYCHIATRY**	**H-Index:**49
291.	Joy, P., Prithishkumar, I. J. and Isaac, B. Clinical anatomy of the inferior epigastric artery with special relevance to invasive procedures of the anterior abdominal wall J Minim Access Surg; 2017, 13 (1): 18-21 **Address:** Department of Anatomy, All Institute of Medical Sciences, Raipur, Chhattisgarh, India. Department of Anatomy, **Christian Medical College, Vellore,** Tamil Nadu, India. **INTRODUCTION:** Injury to the inferior epigastric artery (IEA) has been reported	**INT**	**JAN TO JUN**	**ANATOMY**	**PMID:**27251822 **Impact Factor:** 1.282 **H-Index:**19

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	following lower abdominal wall surgical incisions, abdominal peritoneocentesis and trocar placements at laparoscopic port sites, resulting in the formation of abdominal wall haematomas that may expand considerably due to lack of tissue resistance. The aim of this study was to localise its course in relation to standard anatomic landmarks and suggest safe areas for performance of invasive procedures. **MATERIALS AND METHODS:** Sixty IEAs of 30 adult cadavers (male = 19; female = 11) were dissected and the course of the IEA noted in relation to the mid-inguinal point, anterior superior iliac spine (ASIS) and umbilicus. **RESULTS:** The mean distance of the IEA from the midline was 4.45 +/- 1.42 cm at the level of the mid-inguinal point, 4.10 +/- 1.15 cm at the level of ASIS and 4.49 +/- 1.15 cm at the level of umbilicus. There was an average of 3.3 branches per IEA with more branches arising from its lateral aspect. The IEA was situated within one-third (32%) of the distance between the midline and the sagittal plane through ASIS at all levels. **CONCLUSION:** To avoid injury to IEA, trocars can be safely inserted 5.5 cm [mean + 1 standard deviation (SD)] away from the midline (or) slightly more than one-third of the distance between the midline and a sagittal plane running through ASIS. These findings may be useful not only for laparoscopic procedures but also for image-guided biopsy, abdominal paracentesis, and placement of abdominal drains.				
292.	JP Russell Ravan1, Naveen Thomas2, Thomas Paul3, Samuel Prasanna4, Nihal Thomas5, Deepa Ramaswamy6 The endocrine impact of long term risperidone therapy in Asian Indian patients Open Journal of Psychiatry and Allied Sciences, Volume 8, Number 2, 2017, pp. 107-112(6) **Affiliations:** 1: Associate Professor and Head of Unit II, Post Graduate of Psychiatry, Kalinga Institute of Medical Science and PBMH, Bhubaneswar, Odisha, India 2: Consultant Psychiatrist, Melbourne Health, Australia 3: Department of Endocrinology, **CMC Vellore,** Tamil Nadu, India 4: Department of Biostatistics and Research, **CMC Vellore,** Tamil Nadu, India 5: Professor of Endocrinology, **CMC Vellore,** Tamil Nadu, India 6: Professor and Unit Head, Department of Psychiatry, **CMC Vellore,** Tamil Nadu, India DOI: 10.5958/2394-2061.2017.00003.9	**NAT**	**JUL TO DEC**	**ENDOCRINOLOGY, BIOSTATISTICS, PSYCHIATRY**	**Indexed in Index Copernicus, Indian Citation Index**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Background: Risperidone is a widely used antipsychotic, known to cause secondary hyperprolactinaemia. Related problems include bone mineral density (BMD) and vitamin D deficiency. However, there is insufficient information about the extent, severity, and association between these side effects, particularly in the Asian population. Objectives: To estimate the prevalence of osteoporosis, and vitamin D deficiency in patients taking risperidone for more than one year. Also, to investigate whether erectile dysfunction (ED) or menstrual dysfunction (MD) can be used as a proxy indicator of BMD loss in such patients, replacing dual energy X-ray absorptiometry (DEXA) scan. Method: Sixty-five patients (mean age 29.6) receiving risperidone as the only prolactin raising medication for minimum period of one year were selected taking into consideration the socio-demographic and clinical variables. History of ED/MD, DEXA measurement of their lumbar and hip bone, and endocrine variables were recorded. Results: The prevalence of hyperprolactinaemia in female was found to be 84.4% and in males 78.8%; females being 1.4 times more at risk than males. Abnormal BMD was found in more than 40% of the subjects. Furthermore, 30% had vitamin D deficiency and 60.8% had vitamin D insufficiency. A statistically significant association was observed between ED/MD and BMD (odds ration [OR] 3.71, confidence interval [CI] 1.23-11.24, p=0.02), but this varied according to the gender. Conclusion: These results suggest that patients on long term risperidone are at high risk of developing hyperprolactinaemia, reduced BMD and Vitamin D, although multiple contributory factors or mechanisms can be suggested. Clinically, ED was more significantly associated with changes in BMD.				
293.	Jyothirmayi, C. A., Halder, A., Yadav, B., Samuel, S. T., Kuruvilla, A. and Jose, R. A randomized controlled double blind trial comparing the effects of the prophylactic antibiotic, Cefazolin, administered at caesarean delivery at two different timings (before skin incision and after cord clamping) on both the mother and newborn BMC Pregnancy Childbirth; 2017, 17 (1): 340 **Address:** Department of Neonatology, **Christian Medical College, Vellore,** India. Department of Obstetrics and Gynecology Unit IV, **Christian Medical College, Vellore,** India. Department of Biostatistics, **Christian Medical College, Vellore,** India.	**INT**	**JUL TO DEC**	**NEONATOLOGY, OBSTETRICS AND GYNECOLOGY UNIT IV, BIOSTATISTICS**	**PMID:**28974203 **PMCID:**5627463 **Impact Factor:**2.263 **H-Index:**53

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	MLL Hospital, Madanapalle, Chittoor, Andhrapradesh, India. Department of Obstetrics and Gynecology Unit IV, **Christian Medical College, Vellore,** India. rubyjose1@gmail.com. BACKGROUND: Caesarean delivery (CD) increases the risk of postpartum infection by 5 to 20 fold. Prevention of surgical site infection (SSI) is the goal of antibiotic prophylaxis. This study was carried out to assess the optimum timing for prophylactic antibiotic administration and to assess the amount of the antibiotic crossing the placental barrier. METHODS: Eligible mothers were recruited, after informed consent, once the decision for CD was made. Each mother received two injections, one prior to skin incision and one after cord clamping, (one being the study drug Cefazolin, and the other, a placebo) based on the randomization code. Demographic, maternal and neonatal monitoring data until discharge from hospital, and at the 6 weeks postpartum visit were collected. Levels of the prophylactic antibiotic were measured from the cord blood in every 8th neonate. The objective of the study was to compare the effects of the prophylactic antibiotic, intravenous Cefazolin 1 g, administered at Caesarean delivery (CD) at two different timings (before skin incision and after cord clamping) on both the mother and newborn. The secondary outcomes that were followed up were the number of maternal and neonatal readmissions. An appropriate test for significance, Fisher's exact test was used to find the association between risk variables and outcome. RESULTS: The total numbers of mothers enrolled were 1106, of whom 553 mothers received antibiotic prior to skin incision (pre-incision) and 543 mothers received antibiotic after cord clamping (post-incision). The pre-incision group had significantly less febrile illness (RR = 0.48, 95% CI: 0.29 - 0.80) and SSI (RR = 0.14, 95% CI: 0.04 - 0.53) when compared with the post- incision group. The post-incision group significantly had >7 days hospital stay when compared to the 4-7 days stay of the pre-incision group (p = 0.005).There were no differences in any of the neonatal outcomes. The quantity of the antibiotic in the cord blood was only 2-3%. CONCLUSIONS: Pre incision prophylactic antibiotic protected the mother from SSI and febrile illness and decreased the hospital stay significantly. TRIAL REGISTRATION: The Clinical Trials Registry India (CTRI) was [CTRI/2016/03/006710 dated, 04/03/2016].				
294.	Kabeerdoss, J., Goel, R., Mohan, H. and Danda, D. High Expression of S100 Calgranulins Genes in Peripheral Blood Mononuclear Cells of Patients With Takayasu Arteritis	**INT**	**JUL TO DEC**	**RHEUMATOLOGY**	**NO PMID** **WOS:**000413181403222

INT – INTERNATIONAL; NAT – NATIONAL; PMID: PUBMED ID; PMCID: PUBMED CENTRAL ID; WOS – WEB OF SCIENCE ID

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Annals of the Rheumatic Diseases; 2017, 76 1061-1062				**Impact Factor:**12.811 **H-Index:**189
295.	Kabeerdoss, J., Gupta, N., Pulukool, S., Mohan, H., Mahasampath, G. and Danda, D. Anti-C1q Antibody is Associated with Renal and Cutaneous Manifestations in Asian Indian Patients with Systemic Lupus Erythematosus J Clin Diagn Res; 2017, 11 (3): OC39-OC42 **Address:** Lecturer, Department of Rheumatology, **Christian Medical College, Vellore,** Tamil Nadu, India. PG Registrar, Department of Rheumatology, **Christian Medical College, Vellore,** Tamil Nadu, India. Associate Professor, Department of Rheumatology, **Christian Medical College, Vellore,** Tamil Nadu, India. Junior Research Fellow, Department of Rheumatology, **Christian Medical College, Vellore,** Tamil Nadu, India. Associate Research Officer, Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India. Professor and Head, Department of Rheumatology, **Christian Medical College, Vellore,** Tamil Nadu, India. **INTRODUCTION:** C1q play an important role in clearance of immune complexes and apoptotic cell debris. Impaired clearance leads to exposure of C1 native antigen and development of anti-C1q antibody formation. Anti-C1q antibody is well studied in Systemic Lupus Erythematosus (SLE). Significance of anti-C1q Ab in Indian SLE patients and their clinical manifestations is not clear. **AIM:** The aim of this study was to investigate associations between anti-C1q antibody and clinical as well as serological markers of SLE. **MATERIALS AND METHODS:** Retrospective study of SLE patients fulfilling either American College of Rheumatology (ACR) 1990 or Systemic Lupus International Collaborating Clinics (SLICC) 2012 classification criteria were recruited from inpatients and outpatients services of the Clinical immunology and Rheumatology Department, **Christian Medical College** at Vellore, India between March 2013 and January 2015. Anti-C1q antibody was assayed by ELISA (Demeditec Diagnostics GmbH, Germany). Logistic regression analysis was performed to find the association of anti-C1q antibodies with serological and clinical parameters in SLE including Lupus Nephritis (LN).	**INT**	**JAN TO JUN**	**RHEUMATOLOGY, BIOSTATISTICS**	**PMID:**28511434 **Impact Factor:**0.650 **H-Index:** 18

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	RESULTS: Sixty nine patients (54.76%) out of 126 SLE patients had LN. Anti-C1q levels were higher in patients with LN as compared to those without ($p<0.05$). Anti-C1q antibody was also significantly associated with positive C1q immunofluorescence staining in renal biopsy specimens ($p<0.05$). Overall, renal Systemic Lupus Erythematosus Disease Activity Index (SLEDAI) {OR 1.35 (1.08-1.69)}, low C4 {OR 3.11 (1.04-9.26)} and mucocutaneous manifestation {OR 4.72 (1.38-16.05)} were independently associated with anti-C1q levels in serum. **CONCLUSION:** Renal SLEDAI, low C4 and mucocutaneous manifestations were independently associated with raised anti C1q antibody in SLE patients.				
296.	Kabeerdoss, J., Sandhya, P. and Danda, D. Y RNA derived small RNAs in Sjogren's syndrome: Candidate biomarkers? International Journal of Rheumatic Diseases; 2017, 20 (11): 1763-1766 **Address:** Department of Immunology and Rheumatology, **Christian Medical College, Vellore,** Tamil Nadu, India. doi: 10.1111/1756-185X.13229. Epub 2017 Nov 19. Anti-Ro and anti-La antibodies are important in pathogenesis and diagnosis of Sjogren's syndrome (SS). Ro60, Ro52 and La are RNA binding proteins of Y RNA, which were discovered more than three decades ago. Significance of Y RNA is not appreciated as much as Ro and La in SS. It can be hypothesised that 5'-YsRNA, short fragment derived from Y RNA may be recognized by TLR7 in pDC, which induces type I interferon signature in SS. New genomics tools, namely RNA seq, enables assay of 5'-YsRNA in blood. 5'-YsRNA has the potential to be a novel biomarker of SS.	**INT**	**JUL TO DEC**	**IMMUNOLOGY AND RHEUMATOLOGY, IDTRC**	**PMID:**29152879 **Impact Factor:**2.624 **H-Index:** 27
297.	Kalappurayil, N. B., Thomas, J., Mankuni, B. and Thomas, V. Assessment of Disease Severity and Role of Cytomegalo Virus Infection in Patients with Ulcerative Colitis J Clin Diagn Res; 2017, 11 (3): EC07-EC11 **Address:** Assistant Professor, Department of General Pathology, **Christian Medical College, Vellore,** Tamil Nadu, India. Consultant, Department of Gastroenterology, Caritas Hospital, Kottayam, Kerala,	**INT**	**JAN TO JUN**	**GENERAL PATHOLOGY**	**PMID:**28511386 **Impact Factor:**0.650 **H-Index:** 18

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	India. Associate Professor, Department of Pathology, Government Medical College, Idukki, Kerala, India. Professor, Department of Gastroenterology, Government Medical College, Kozhikode, Kerala, India. **INTRODUCTION:** Course of Ulcerative Colitis is characterized by intermittent flares interposed between variable periods of remission. Identification of exacerbating factors and appropriate assessment of disease activity are crucial in deciding the choice of treatment. **AIM:** To evaluate various clinical, endoscopic and histological parameters in assessing disease activity and to find out various risk factors involved in the exacerbation of ulcerative colitis especially the role of Cytomegalo Virus (CMV) infection. **MATERIALS AND METHODS:** It was a prospective study of patients diagnosed as ulcerative colitis presenting with acute exacerbation of symptoms (cases) and those who were in remission (controls). A detailed evaluation of the disease history including personal history, treatment compliance and clinical disease severity were noted. Investigations including blood routine, endoscopic examination with biopsy, histopathological examination and immunohistochemistry for CMV were done on the biopsy sample. **RESULTS:** A total of 58 patients with ulcerative colitis were studied which included 37 cases and 21 controls. Out of the various clinical and demographic parameters, Good treatment compliance (p =0.0003) and Perceived Stress Scale (PSS) score (p=0.0001) showed significant difference between cases and controls. Basic laboratory parameters {Haemoglobin level, Total Leucocyte Count (TLC) and Erythrocyte Sedimentation Rate (ESR)}, clinical disease severity predictors (Truelove and Witt's criteria, Mayo score and endoscopic disease severity grade) and Geboes histological scoring showed significant difference between cases and controls. The prevalence of CMV colitis in our study was only 5.4% (two cases). **CONCLUSION:** Clinical and endoscopic disease severity indicators can be used as predictors of histological activity in ulcerative colitis. Poor treatment compliance and stress are important risk factors for acute exacerbation of ulcerative colitis. Clinicians should be aware of the possibility of concurrent CMV infection while treating patients with acute exacerbation of ulcerative colitis not responding to the conventional management. Reduced prevalence of CMV colitis in cases of acute exacerbation of ulcerative colitis in our study may be due to the small sample size, reduced number of steroid dependent cases or reduced severity of our cases.				
298.	Kalipatnapu, S., Kuppuswamy, S., Venugopal, G., Kaliaperumal, V. and Ramadass, B. Fecal total iron Concentration is inversely associated with Fecal Lactobacillus in	**INT**	**JAN TO JUN**	**GASTROINTESTINAL SCIENCES**	**PMID:**28076655 **WOS:**000406478400013

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	preschool children Journal of Gastroenterology and Hepatology; 2017, 32 (8): 1475-1479 **Address: Christian Medical College, Vellore**. Indian Institute of Technology, Bhubaneswar, India. **BACKGROUND:** Iron deficiency is associated with stunting and poor performance in children. Oral iron supplementation is widely promoted to correct iron deficiency. However, excess iron may be toxic to beneficial luminal gut bacteria and could support growth of pathobionts. **OBJECTIVE:** To analyze the fecal total iron concentration and fecal Lactobacillus levels in a cohort of stunted and normal children. DESIGN: The study was undertaken in two different locations. One of them is a rural area and other is a semi-urban-slum area, both areas are located in the Vellore district of Tamilnadu state. 20 children (10 stunted and 10 normal growth) aged 2 to 5 years from each area were recruited. Both groups were nearly identical demographically. Fecal samples were collected. Fecal total iron was estimated, fecal DNA was extracted and subjected to 16S rDNA-targeted real-time polymerase chain reaction to determine the relative predominance of Lactobacillus and Escherichia coli. **RESULTS:** The fecal total iron concentration in rural children (3656 microg/ g wet wt. of feces) was significantly higher when compared to semi-urban-slum children (114.9 microg/ g wet wt. of feces, $p < 0.005$). Inversely, fecal Lactobacillus in rural children (Median 3.18 x 10-3 Relative difference compared with total bacteria) was significantly lower when compared to semi-urban-slum children (Median 59.33 x 10-3, $p < 0.005$). There was no significant change observed between normal and stunted children. E.coli levels remained unaffected. **CONCLUSION:** The present study documents an inverse relationship between fecal iron concentration and Fecal Lactobacillus concentration in children belonging to two different localities independent of their nutritional status.				**Impact Factor:**3.452 **H-Index:** 108
299.	Kamath MS(1), Maheshwari A, Bhattacharya S, Lor KY, Gibreel A. Oral medications including clomiphene citrate or aromatase inhibitors with gonadotropins for controlled ovarian stimulation in women undergoing in vitro fertilisation. Cochrane Database Syst Rev. 2017 Nov 2;11:CD008528. doi: 10.1002/14651858.CD008528.pub3.	**INT**	**JUL TO DEC**	**REPRODUCTIVE MEDICINE UNIT**	**PMID:**29096046 **WOS:**000416982300055 **Impact Factor:**6.124 **H-Index:** 189

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Author information: (1)Reproductive Medicine Unit, **Christian Medical College and Hospital,** Ida Scudder Road, Vellore, Tamil Nadu, India, 632004. Update of Cochrane Database Syst Rev. 2012 Nov 14;11:CD008528. BACKGROUND: Gonadotropins are the most commonly used medications for controlled ovarian stimulation in in vitro fertilisation (IVF). However, they are expensive and invasive, and are associated with the risk of ovarian hyperstimulation syndrome (OHSS). Recent calls for more patient-friendly regimens have led to growing interest in the use of clomiphene citrate (CC) and aromatase inhibitors with or without gonadotropins to reduce the burden of hormonal injections. It is currently unknown whether regimens using CC or aromatase inhibitors such as letrozole (Ltz) are as effective as gonadotropins alone. OBJECTIVES: To determine the effectiveness and safety of regimens including oral induction medication (such as clomiphene citrate or letrozole) versus gonadotropin-only regimens for controlled ovarian stimulation in IVF or intracytoplasmic sperm injection (ICSI) treatment. SEARCH METHODS: We searched the following databases: Cochrane Gynaecology and Fertility Group Specialised Register (searched January 2017), the Cochrane Central Register of Controlled Trials (CENTRAL CRSO), MEDLINE (1946 to January 2017), Embase (1980 to January 2017), and reference lists of relevant articles. We also searched trials registries ClinicalTrials.gov (clinicaltrials.gov/) and the World Health Organization International Clinical Trials Registry Platform (www.who.int/trialsearch/Default.aspx). We handsearched relevant conference proceedings. SELECTION CRITERIA: We included randomized controlled trials (RCTs). The primary outcomes were live-birth rate (LBR) and OHSS. DATA COLLECTION AND ANALYSIS: Three review authors independently assessed trial eligibility and risk of bias. We calculated risk ratios (RR) and Peto odds ratio (OR) with 95% confidence intervals (CIs) for dichotomous outcomes and mean differences (MD) for continuous outcomes. We analyzed the general population of women undergoing IVF treatment and (as a separate analysis) women identified as poor responders. We assessed the overall quality of the evidence using the GRADE approach. MAIN RESULTS: We included 27 studies in the updated review. Most of the new trials in the updated review included poor responders and evaluated Ltz protocols. We could perform meta-analysis with data from 22 studies including a				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	total of 3599 participants. The quality of the evidence for different comparisons ranged from low to moderate. The main limitations in the quality of the evidence were risk of bias associated with poor reporting of study methods, and imprecision.In the general population of women undergoing IVF, it is unclear whether CC or Ltz used with or without gonadotropins compared to use of gonadotropins along with gonadotropin-releasing hormone (GnRH) agonists or antagonists resulted in a difference in live birth (RR 0.92, 95% CI 0.66 to 1.27, 4 RCTs, n = 493, I2 = 0%, low-quality evidence) or clinical pregnancy rate (RR 1.00, 95% CI 0.86 to 1.16, 12 RCTs, n = 1998, I2 = 3%, moderate-quality evidence). This means that for a typical clinic with 23% LBR using a GnRH agonist regimen, switching to CC or Ltz protocols would be expected to result in LBRs between 15% and 30%. Clomiphene citrate or Ltz protocols were associated with a reduction in the incidence of OHSS (Peto OR 0.21, 95% CI 0.11 to 0.41, 5 RCTs, n = 1067, I2 = 0%, low-quality evidence). This means that for a typical clinic with 6% prevalence of OHSS associated with a GnRH regimen, switching to CC or Ltz protocols would be expected to reduce the incidence to between 0.5% and 2.5%. We found evidence of an increase in cycle cancellation rate with the CC protocol compared to gonadotropins in GnRH protocols (RR 1.87, 95% CI 1.43 to 2.45, 9 RCTs, n = 1784, I2 = 61%, low-quality evidence). There was moderate quality evidence of a decrease in the mean number of ampoules used,) and mean number of oocytes collected with CC with or without gonadotropins compared to the gonadotropins in GnRH agonist protocols, though data were too heterogeneous to pool.Similarly, in the poor-responder population, it is unclear whether there was any difference in rates of live birth (RR 1.16, 95% CI 0.49 to 2.79, 2 RCTs, n=357, I2 = 38%, low-quality evidence) or clinical pregnancy (RR 0.85, 95% CI 0.64 to 1.12, 8 RCTs, n = 1462, I2 = 0%, low-quality evidence) following CC or Ltz with or without gonadotropin versus gonadotropin and GnRH protocol. This means that for a typical clinic with a 5% LBR in the poor responders using a GnRH protocol, switching to CC or Ltz protocols would be expected to yield LBRs between 2% to 14%. There was low quality evidence that the CC or Ltz protocols were associated with an increase in the cycle cancellation rate (RR 1.46, 95% CI 1.18 to 1.81, 10 RCTs, n = 1601, I2 = 64%) and moderate quality evidence of a decrease in the mean number of gonadotropin ampoules used and the mean number of oocytes collected, though data were too heterogeneous to pool. The adverse effects of these protocols were poorly reported. In addition, data on foetal abnormalities following use of CC or Ltz protocols are lacking. AUTHORS' CONCLUSIONS: We found no conclusive evidence indicating that clomiphene citrate or letrozole with or				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	without gonadotropins differed from gonadotropins in GnRH agonist or antagonist protocols with respect to their effects on live-birth or pregnancy rates, either in the general population of women undergoing IVF treatment or in women who were poor responders. Use of clomiphene or letrozole led to a reduction in the amount of gonadotropins required and the incidence of OHSS. However, use of clomiphene citrate or letrozole may be associated with a significant increase in the incidence of cycle cancellations, as well as reductions in the mean number of oocytes retrieved in both the general IVF population and the poor responders. Larger, high-quality randomized trials are needed to reach a firm conclusion before they are adopted into routine clinical practice. DOI: 10.1002/14651858.CD008528.pub3				
300.	Kamath, M. S. and Muthukumar, K. Appendix B: Solid Surface Vitrification Methods Mol Biol; 2017, 1568 297-307 **Address:** Reproductive Medicine Unit, **Christian Medical College** Hospital, Ida Scudder Road, Vellore, 632004, Tamil Nadu, India. dockamz@gmail.com Reproductive Medicine Unit, **Christian Medical College** Hospital, Ida Scudder Road, Vellore, 632004, Tamil Nadu, India. Solid surface vitrification method involves direct contact of carrier loaded with droplet containing gametes or embryos with precooled metal surface. Over the years, following certain modifications, solid surface vitrification has emerged as an efficient method for vitrifying human gametes and embryos. Here, we describe the principle and methodology of solid surface vitrification.	**INT**	**JAN TO JUN**	**REPRODUCTIVE MEDICINE UNIT**	**PMID:**28421506 **Impact Factor:**0.790 **H-Index:** 104
301.	Kamath, M. S. and Sunkara, S. K. Perinatal outcomes after oocyte donation and in-vitro fertilization Curr Opin Obstet Gynecol; 2017, 29 (3): 126-130 **Address:** aReproductive Medicine Unit, **Christian Medical College, Vellore,** India bQueen's Hospital, Barking Havering Redbridge University Hospitals NHS Trust, Essex, UK.	**INT**	**JAN TO JUN**	**REPRODUCTIVE MEDICINE UNIT**	**PMID:**28234769 **Impact Factor:**2.416 **H-Index:** 62

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	PURPOSE OF REVIEW: To critically appraise the existing literature on perinatal outcomes following oocyte donation (OD) pregnancies and compare it with autologous in-vitro fertilization (IVF) pregnancies. RECENT FINDINGS: OD pregnancies are at higher risk of developing hypertensive disorders compared with autologous IVF. The risk of preterm birth and low birth weight is higher with singleton and multiple OD compared with autologous IVF pregnancies. There is no increased risk of congenital malformations following OD compared with autologous IVF births. SUMMARY: OD pregnancies are at higher risk of developing hypertensive disorders and adverse perinatal outcomes compared with autologous IVF.				
302.	Kamath, M. S., Antonisamy, B., Mascarenhas, M. and Sunkara, S. K. High-risk of preterm birth and low birth weight after oocyte donation IVF: analysis of 133,785 live births Reprod Biomed Online; 2017, 35 (3): 318-324 **Address:** Reproductive Medicine Unit, **Christian Medical College Hospital, Vellore,** 632004, India. Electronic address: dockamz@gmail.com. Department of Biostatistics, **Christian Medical College Hospital, Vellore,** 632004, India. Leeds Centre for Reproductive Medicine, Seacroft Hospital, Leeds Teaching Hospital NHS trust, Leeds, UK. Queen's Hospital, Barking Havering Redbridge University Hospitals NHS Trust, Essex, UK. A higher risk of pregnancy complications occurs after assisted reproductive techniques compared with spontaneously conceived pregnancies. This is attributed to the underlying infertility and assisted reproduction technique procedures involved during treatment. It is a matter of interest whether use of donor oocytes affects perinatal outcomes compared with pregnancies after autologous IVF. Anonymized data were obtained from the Human Fertilization and Embryology Authority. The analysis included 5929 oocyte donation and 127,856 autologous IVF live births. Data from all women who underwent donor oocyte recipient or autologous IVF cycles, both followed with fresh embryo transfer, were analysed to compare perinatal outcomes of preterm birth (PTB) and low birthweight (LBW) after singleton and multiple live births. The risk of adverse perinatal outcomes after oocyte donation was increased: adjusted OR (aOR) 1.56, 99.5% CI 1.34 to 1.80 for PTB and aOR 1.43, 99.5% CI 1.24 to 1.66 for LBW were significantly higher	**INT**	**JUL TO DEC**	**REPRODUCTIVE MEDICINE UNIT, BIOSTATISTICS**	**PMID:**28687207 **Impact Factor:**3.249 **H-Index:** 89

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	after oocyte donation compared with autologous IVF singletons. The adjusted odds PTB (aOR 1.21, 99.5% CI 1.02 to 1.43) was significantly higher after oocyte donation compared with autologous IVF multiple births. Analysis of this large dataset suggests significantly higher risk of PTB and LBW after ooctye donation compared with autologous IVF pregnancies.				
303.	Kamath, M. S., Chittawar, P. B., Kirubakaran, R. and Mascarenhas, M. Use of granulocyte-colony stimulating factor in assisted reproductive technology: A systematic review and meta-analysis Eur J Obstet Gynecol Reprod Biol; 2017, 214 16-24 **Address:** Reproductive Medicine Unit, **Christian Medical College, Vellore,** 632004, India. Electronic **Address:** dockamz@gmail.com. Department of Reproductive Medicine, Bansal Hospital, Bhopal, India. Cochrane South Asia, Prof. BV Moses Centre for Evidence-Informed Health Care and Health Policy, **Christian Medical College, Vellore,** India. Leeds Centre for Reproductive Medicine, Seacroft Hospital, Leeds, United Kingdom. Granulocyte-colony stimulating factor (G-CSF), a glycoprotein, has been used in women undergoing Assisted Reproductive Technology (ART). We decided to undertake a systematic review to evaluate the effectiveness of G-CSF in women with thin endometrium and recurrent implantation failure (RIF) undergoing ART. The outcomes included an increase in endometrial thickness, live birth, clinical pregnancy rates and adverse effects. We included two trials evaluating women with thin endometrium and another two trials evaluating women with RIF. The pooled data did not reveal statistically significant increase in endometrial thickness following G-CSF in women with thin endometrium (mean difference 0.47, 95% CI -1.36-2.31; I2 82%). However significantly higher clinical pregnancy rate was noted (RR 2.43, 95% CI 1.09-5.40; I2 0%) following G-CSF compared to no intervention and quality of evidence for both these outcomes was very low. In RIF population, the administration of G-CSF was associated with a significantly higher clinical pregnancy rate compared to no intervention with pooled risk ratio of 2.51 (95% CI 1.36-4.63; I2 0%) and quality of evidence being low. Findings of current review suggest a possible benefit of G-CSF in women with thin endometrium undergoing ART and RIF. However these findings need to be further validated in larger trials	**INT**	**JAN TO JUN**	**REPRODUCTIVE MEDICINE UNIT, COCHRANE SOUTH ASIA**	**PMID:**28458165 **Impact Factor:**1.666 **H-Index:** 83

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	before G-CSF can be used in routine clinical practice.				
304.	Kamath, M. S., Kirubakaran, R., Mascarenhas, M. and Sunkara, S. K. Perinatal outcomes after stimulated versus natural cycle IVF: a systematic review and meta-analysis Reprod Biomed Online; 2018, 36 (1): 94-101 **Address:** Reproductive Medicine Unit, **Christian Medical College Hospital, Vellore,** 632004, India. Electronic address: dockamz@gmail.com. Cochrane South Asia, Prof. BV Moses Centre for Evidence-Informed Health Care and Health Policy, **Christian Medical College Hospital, Vellore,** 632004, India. Leeds Centre for Reproductive Medicine, Seacroft Hospital, Leeds Teaching Hospital NHS trust, Leeds, UK. Queen's Hospital, Barking Havering Redbridge University Hospitals NHS Trust, Essex, UK. Pregnancies resulting from assisted reproductive techniques are at higher risk of adverse perinatal outcomes compared with spontaneous conceptions. Underlying infertility and IVF procedures have been linked to adverse perinatal outcomes. It is important to know if ovarian stimulation influences perinatal outcomes after IVF. A systematic search for relevant studies was conducted up to November 2016 on the following databases: PubMed, EMBASE, DARE and Cochrane Central Register of Controlled Trials. Perinatal outcomes included preterm birth (PTB), low birth weight (LBW), small for gestational age (SGA), large for gestational age (LGA) and congenital anomalies. Data from four studies, which included a total of 96,996 and 704 singleton live births after stimulated IVF and natural or modified natural cycle IVF, were included in the meta-analysis. The risk of PTB (RR 1.27, 95% CI 1.03 to 1.58) and LBW (RR 1.95, 95% CI 1.03 to 3.67) were significantly higher after stimulated compared with natural or modified natural cycle IVF. Data from one study were available for SGA, LGA, congenital anomalies and no significant differences were reported between the groups. This study suggests a higher risk of PTB and LBW after stimulated IVF compared with natural or modified natural IVF, although the absolute increase in risk may be low.	**INT**	**JUL TO DEC**	**REPRODUCTIVE MEDICINE UNIT, COCHRANE SOUTH ASIA**	**PMID:**29111312 **Impact Factor:**3.249 **H-Index:** 89
305.	Kamath, M. S., Mascarenhas, M., Kirubakaran, R., Nair, R. and Kulkarni, A. Use of embryo culture supernatant to improve clinical outcomes in assisted reproductive technology: a systematic review and meta-analysis	**INT**	**JAN TO JUN**	**REPRODUCTIVE MEDICINE UNIT, COCHRANE**	**PMID:**28446046 **Impact Factor:**1.103 **H-Index:** 30

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Hum Fertil (Camb); 2017, 1-8 **Address:** a Reproductive Medicine Unit, **Christian Medical College, Vellore,** India. b Leeds Centre for Reproductive Medicine, Seacroft Hospital, Leeds, UK. c Cochrane South Asia, Prof. BV Moses Center for Evidence-Informed Health Care and Health Policy, **Christian Medical College, Vellore,** India. d Department of Reproductive Medicine, Matha Hospital, Kottayam, India. e Homerton Fertility Center, Homerton University Hospital, London, UK. We planned a systematic review and meta-analysis of randomized clinical trials (RCTs) to examine the best available evidence regarding the intrauterine instillation of embryo culture supernatant prior to embryo transfer in ART. The outcomes were: (i) live birth; (ii) clinical pregnancy; (iii) multiple pregnancy; and (iv) miscarriage rates. Five RCTs were considered eligible and available for qualitative synthesis. Due to clinical heterogeneity, results from only two trials were combined for the meta-analysis. The live birth rate (risk ratio [RR], 0.47; 95% confidence interval [CI] 0.22-0.98; one study, 60 participants, low-quality evidence) was found to be significantly lower with intrauterine instillation of embryo culture supernatant compared to no intervention. The clinical pregnancy rate was similar between the embryo culture supernatant group and the control group (RR 1.02 RR, 95% CI 0.77-1.36; two trials, 156 participants, I2 = 0%). To conclude, this review did not find any improvement in clinical pregnancy rate with the intrauterine instillation of embryo culture supernatant prior to embryo transfer compared to no intervention in women undergoing ART and we remain uncertain regarding its effect on live birth rate.			**SOUTH ASIA**	
306.	Kaniyil, S., Smithamol, P. B., Joseph, E., Krishnadas, A. and Ramadas, K. T. A Survey of Current Practice of Supraglottic Airway Devices in Pediatric Anesthesia from India Anesth Essays Res; 2017, 11 (3): 578-582 **Address:** Department of Anesthesia, Government Medical College, Kozhikode, Kerala, India. Department of Anesthesia, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Anesthesia, Government Medical College, Thrissur, Kerala, India. BACKGROUND AND OBJECTIVES: Supraglottic airway devices (SADs) have	**INT**	**JUL TO DEC**	**ANESTHESIA**	**PMID:**28928551 **PMCID:**5594770 **Impact Factor:** NA **H-Index:** NA

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	revolutionized the pediatric anesthetic practice and got a key role in difficult airway (DA) management. Several modifications of SADs design had come up to improve their safety. AIM: The aim of this survey was to determine the current usage of SADs in pediatric anesthetic practice, their availability, and to know any difficulties noted in practice. METHODS: It was a questionnaire survey among the anesthesiologists who attended the National Pediatric Anesthesia Conference-2016. The questionnaire assessed the current practice preferences of SADs in routine pediatric cases and DA management, availability of various devices, and any difficulties noted in their usage. RESULTS: First-generation SADs were widely available (97%), and 64% of respondents preferred to use it for pediatric short cases. 64% felt the use of SADs free their hands from holding the facemask and 58% found better airway maintenance with it. Intraoperative displacement (55%) was the common problem reported and only 11% felt aspiration as a problem. Most of the respondents (73%) accepted its use as rescue device in airway emergency, and 84% felt the need of further randomized controlled studies on safety of SADs in children. The majority were not confident to use SADs in neonates. INTERPRETATION AND CONCLUSIONS: The key role of SADs in DA management was well accepted, and aspiration was not a major problem with the use of SADs. Although many newer versions of SADs are available, classic laryngeal mask remains the preferred SAD for the current practitioner. Further, RCTs to ensure the safety of SADs in children are warranted.				
307.	Kapoor N(1), Cherian KE(1), Pramanik BK(1), Govind S(1), Winford ME(1), Shetty S(1), Thomas N(1), Paul TV(1). Association between Dental Health and Osteoporosis: A Study in South Indian Postmenopausal Women. J Midlife Health. 2017 Oct-Dec;8(4):159-162. doi: 10.4103/jmh.JMH_21_17. **Author information:** (1)Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College, Vellore,** Tamil Nadu, India. **Aim:** This study aims to objectively assess the dentition status in South Indian postmenopausal women and compare the dental health of osteoporotic participants with nonosteoporotic individuals. **Materials and Methods:** A total of 150 consecutive ambulatory South Indian postmenopausal women (>50 years of age)	**INT**	**JUL TO DEC**	**ENDOCRINOLOGY**	**PMID:**29307976 **PMCID:**PMC5753495 **Impact Factor:** NA **H-Index:** NA

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	were assessed for their dental health using an internationally validated scoring system. Bone mineral density (BMD) was assessed using a dual-energy X-ray absorptiometry scanner. Results: About 39% of the participants were found to have osteoporosis and 23% had osteopenia at any site. More than half of them (57%) had poor dental health, and the predominant problems were cavities (43.5%) and loss of teeth (75%). Among 112 women who had tooth loss, the mean tooth loss was 4.8. The mean tooth loss among patients with normal BMD was 1.09 ± 1.2, in osteopenia was 2.1 ± 2, and in osteoporosis was 5.4 ± 2.8 ($P < 0.01$). The odds of having osteoporosis among the patients with three or more tooth loss were found to be 4.2 (95% confidence interval = 2.4-7.3). **Conclusion:** Postmenopausal women with osteoporosis had significantly higher number of tooth loss. Tooth loss may thus be used as a surrogate marker to predict osteoporosis. DOI: 10.4103/jmh.JMH_21_17 Conflict of interest statement: There are no conflicts of interest.				
308.	Karathedath, S., Rajamani, B. M., Musheer Aalam, S. M., Abraham, A., Varatharajan, S., Krishnamurthy, P., Mathews, V., Velayudhan, S. R. and Balasubramanian, P. Role of NF-E2 related factor 2 (Nrf2) on chemotherapy resistance in acute myeloid leukemia (AML) and the effect of pharmacological inhibition of Nrf2 PLoS One; 2017, 12 (5): e0177227 **Address:** Department of Haematology, **Christian Medical College, Vellore,** India. Centre for Stem Cell Research, **Christian Medical College, Vellore,** India. Department of Pharmacology, Toxicology and Therapeutics, Kansas University Medical Centre, Kansas City, Kansas, United States of America. Cytarabine (Ara-C) and Daunorubicin (Dnr) forms the backbone of acute myeloid leukemia (AML) therapy. Drug resistance and toxic side effects pose a major threat to treatment success and hence alternate less toxic therapies are warranted. NF-E2 related factor-2 (Nrf2), a master regulator of antioxidant response is implicated in chemoresistance in solid tumors. However, little is known about the role of Nrf2 in AML chemoresistance and the effect of pharmacological inhibitor brusatol in modulating this resistance. Primary AML samples with high ex-vivo IC50 to Ara-C, ATO, Dnr had significantly high NRF2 RNA expression. Gene-specific knockdown of NRF2 improved sensitivity to these drugs in resistant AML cell lines by decreasing	**INT**	**JAN TO JUN**	**HAEMATOLOGY, CENTRE FOR CELL RESEARCH**	**PMID:**28505160 **Impact Factor:**2.806 **H-Index:** 218

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	the expression of downstream antioxidant targets of Nrf2 by compromising the cell's ability to scavenge the ROS. Treatment with brusatol, a pharmacological inhibitor of Nrf2, improved sensitivity to Ara-C, ATO, and Dnr and reduced colony formation capacity. AML cell lines stably overexpressing NRF2 showed increased resistance to ATO, Dnr and Ara-C and increased expression of downstream targets. This study demonstrates that Nrf2 could be an ideal druggable target in AML, more so to the drugs that function through ROS, suggesting the possibility of using Nrf2 inhibitors in combination with chemotherapeutic agents to modulate drug resistance in AML.				
309.	Karunya, R. J., Tharani, P., John, S., Kumar, R. M. and Das, S. Role of Functional Magnetic Resonance Imaging Derived Parameters as Imaging Biomarkers and Correlation with Clinicopathological Features in Carcinoma of Uterine Cervix J Clin Diagn Res; 2017, 11 (8): XC06-XC11 **Address:** Assistant Professor, Department of Radiation Oncology, **Christian Medical College, Vellore,** Tamil Nadu, India. Assistant Professor, Department of Radiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Professor, Department of Radiation Oncology, **Christian Medical College, Vellore,** Tamil Nadu, India. Associate Professor, Department of General Pathology, **Christian Medical College, Vellore,** Tamil Nadu, India. Associate Professor, Department of Radiation Oncology, **Christian Medical College, Vellore,** Tamil Nadu, India. INTRODUCTION: Magnetic Resonance Imaging (MRI) is emerging as a powerful tool in the evaluation and management of cervical cancer. The role of Diffusion Weighted Imaging (DWI) with Apparent Diffusion Coefficient (ADC) as a non-invasive imaging biomarker is promising in characterization of the tumour and prediction of response. AIM: The aim of this study was to evaluate the role of conventional MRI and diffusion weighted MRI in predicting clinicopathological prognostic factors. MATERIALS AND METHODS: This was a retrospective study. The data of 100 cervical cancer patients who had MRI with DWI was retrieved from the database and analysed. Clinico pathological details were collected from the computerized hospital information system. SPSS version 15.0 was used for statistical analysis. RESULTS: The mean tumour dimensions on MRI in x, y and z	**INT**	**JUL TO DEC**	**RADIOTHERAPY, RADIOLOGY, RADIATION ONCOLOGY, GENERAL PATHOLOGY**	**PMID:**28969256 **PMCID:**5620897 **Impact Factor:**0.650 **H-Index:** 18

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	axes were 43.04 mm (+/-13.93, range: 17-85), 37.05mm (+/-11.83, range: 9-80) and 39.63 mm (+/-14.81, range: 14 -76). The mean T2W MRI based tumour volume (TV) was 48.18 (+/-34.3, range: 7-206) and on DWI images was 36.68(+/-33.72, range: 2.5-200). The mean ADC value in patients with squamous cell carcinoma was 0.694 (+/-0.125, n=88), adenocarcinoma was 0.989 (+/-0.309, n=6), adenosquamous was 0.894 (+/-0.324, n=4). There was statistical significant difference in mean ADC between squamous vs. non squamous histology (p = 0.02). The mean ADC values of well differentiated, moderately differentiated, and poorly differentiated tumours were 0.841(+/-0.227, n= 26), 0.729 (+/-0.125, n=28), 0.648 (+/-0.099, n=46) respectively. There was significant statistical difference of mean ADC between well differentiated, moderately differentiated (p=0.020) and poorly differentiated tumours (p=0.0001). Difference between the mean ADC values between the node positive and node negative disease was statistically significant (p=0.0001). There was no correlation between the tumour volumes on T2W and DWI images and ADC values. Sixteen patients had residual/recurrent disease at a median follow up of 12 months (range: 3-59 months). The mean ADC values in this group was 0.71 (n=16) and was not significantly different from the disease free group (mean ADC =0.72, n=74). CONCLUSION: Higher ADC values are associated with favourable histology and differentiation. Adenocarcinomas have higher ADC values followed by adenosquamous followed by squamous cell carcinomas. Well differentiated tumours had higher ADC values than moderately followed by poorly differentiated tumours. DWI with ADC have a potential role as an imaging biomarker for prognostication and needs further studies for routine clinical applications.				
310.	Kasimova AA(1), Shneider MM, Arbatsky NP, Popova AV, Shashkov AS, Miroshnikov KA, **Balaji V**, Biswas I, Knirel YA. Structure and Gene Cluster of the K93 Capsular Polysaccharide of Acinetobacter baumannii B11911 Containing 5-N-Acetyl-7-N-[(R)-3-hydroxybutanoyl] pseudaminic Acid. Biochemistry (Mosc). 2017 Apr;82(4):483-489. doi: 10.1134/S0006297917040101. **Author information:** [1]Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences, 119991 Moscow, Russia; E-mail: yknirel@gmail.com [2]Higher Chemical College of the Russian Academy of Sciences, Dmitry Mendeleev	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY**	**PMID:**28371606 **WOS:**000399430800010 **Impact Factor:**1.537 **H-Index:** 69

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	University of Chemical Technology of Russia, 125047 Moscow, Russia [3]Shemyakin–Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences, 119997 Moscow, Russia; E-mail: mm_shn@mail.ru [4]Moscow Institute of Physics and Technology, 141701 Dolgoprudny, Moscow Region, Russia; E-mail: popova_nastya86@mail.ru [5]State Research Center for Applied Microbiology and Biotechnology, 142279 Obolensk, Moscow Region, Russia [6]Department of Clinical Microbiology, **Christian Medical College, Vellore,** 632004 Tamil Nadu, India; E-mail: vbalaji@cmcvellore.ac.in [7]Department of Microbiology, Molecular Genetics and Immunology, University of Kansas Medical Center, Kansas City, KS 66160, USA; E-mail:ibiswas@kumc.edu Capsular polysaccharide (CPS) assigned to the K93 type was isolated from the bacterium Acinetobacter baumannii B11911 and studied by sugar analysis along with one- and two-dimensional 1H and 13C NMR spectroscopy. The CPS was found to contain a derivative of pseudaminic acid, and the structure of the branched tetrasaccharide repeating unit was established. Genes in the KL93 capsule biosynthesis locus were annotated and found to be consistent with the CPS structure established. The K93 CPS has the α-d-Galp-(1→6)-β-d-Galp-(1→3)-d-GalpNAc trisaccharide fragment in common with the K14 CPS of Acinetobacter nosocomialis LUH 5541 and A. baumannii D46. It also shares the β-d-Galp-(1→3)-d-GalpNAc disaccharide fragment and the corresponding predicted Gal transferase Gtr5, as well as the initiating GalNAc-1-P transferase ItrA2, with a number of A. baumannii strains. DOI: 10.1134/S0006297917040101				
311.	Kattula D, Jayaprakash RR, Nandyal MB Managing Bipolar Affective Disorder in a Tribal District of Odisha Indian Journal of Psychological Medicine. 2017	**NAT**	**JUL TO DEC**	**PSYCHIATRY**	**Impact Factor:**6.36
312.	Kattula, D., Jeyavelu, N., Prabhakaran, A. D., Premkumar, P. S., Velusamy, V., Venugopal, S., Geetha, J. C., Lazarus, R. P., Das, P., Nithyanandhan, K., Gunasekaran, C., Muliyil, J., Sarkar, R., Wanke, C., Ajjampur, S. S., Babji, S., Naumova, E. N., Ward, H. D. and Kang, G. Natural History of Cryptosporidiosis in a Birth Cohort in Southern India Clin Infect Dis; 2017, 64 (3): 347-354	**INT**	**JAN TO JUN**	**GASTROINTESTINAL SCIENCES, BIOSTATISTICS**	**PMID:**28013266 **Impact Factor:**8.216 **H-Index:** 278

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Departments of Gastrointestinal Sciences and. Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India; and. Division of Geographic Medicine and Infectious Diseases, Tufts Medical Center. Department of Public Health and Community Medicine, Tufts University School of Medicine, and. Friedman School of Nutrition Science and Policy, Tufts University, Boston, Massachusetts. **BACKGROUND:** Cryptosporidium is a leading cause of moderate to severe childhood diarrhea in resource-poor settings. Understanding the natural history of cryptosporidiosis and the correlates of protection are essential to develop effective and sustainable approaches to disease control and prevention. **METHODS:** Children (N = 497) were recruited at birth in semiurban slums in Vellore, India, and followed for 3 years with twice-weekly home visits. Stool samples were collected every 2 weeks and during diarrheal episodes were tested for Cryptosporidium species by polymerase chain reaction (PCR). Serum samples obtained every 6 months were evaluated for seroconversion, defined as a 4-fold increase in immunoglobulin G directed against Cryptosporidium gp15 and/or Cp23 antigens between consecutive sera. **RESULTS:** Of 410 children completing follow-up, 397 (97%) acquired cryptosporidiosis by 3 years of age. PCR identified 1053 episodes of cryptosporidiosis, with an overall incidence of 0.86 infections per child-year by stool and serology. The median age for the first infection was 9 (interquartile range, 4-17) months, indicating early exposure. Although infections were mainly asymptomatic (693 [66%]), Cryptosporidium was identified in 9.4% of diarrheal episodes. The proportion of reinfected children was high (81%) and there was clustering of asymptomatic and symptomatic infections ($P < .0001$ for both). Protection against infection increased with the order of infection but was only 69% after 4 infections. Cryptosporidium hominis (73.3%) was the predominant Cryptosporidium species, and there was no species-specific protection. **CONCLUSIONS:** There is a high burden of endemic cryptosporidiosis in southern India. Clustering of infection is suggestive of host susceptibility. Multiple reinfections conferred some protection against subsequent infection.				
313.	Kedia, S., Sharma, R., Makharia, G. K., Ahuja, V., Desai, D., Kandasamy, D., Eapen, A., Ganesan, K., Ghoshal, U. C., Kalra, N., Karthikeyan, D., Madhusudhan, K. S., Philip, M., Puri, A. S., Puri, S., Sinha, S. K., Banerjee, R., Bhatia, S., Bhat, N., Dadhich, S., Dhali, G. K., Goswami, B. D., Issar, S. K., Jayanthi, V., Misra, S. P., Nijhawan, S., Puri, P., Sarkar, A., Singh, S. P., Srivastava, A., Abraham, P. and Ramakrishna, B. S. Imaging of the small intestine in Crohn's disease: Joint position statement of the Indian Society of Gastroenterology and Indian Radiological and Imaging Association	**NAT**	**JUL TO DEC**	**RADIODIAGNOSIS**	**PMID:29307029** **Impact Factor:**0.690 **H-Index:**34

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Indian J Gastroenterol; 2017, 36 (6): 487-508 Address: Department of Gastroenterology and Human Nutrition, All India Institute of Medical Sciences, Ansari Nagar, New Delhi, 110 029, India. Department of Radiodiagnosis, All India Institute of Medical Sciences, Ansari Nagar, New Delhi, 110 029, India. Department of Gastroenterology and Human Nutrition, All India Institute of Medical Sciences, Ansari Nagar, New Delhi, 110 029, India. govindmakharia@gmail.com. Division of Gastroenterology, P D Hinduja Hospital and Medical Research Centre, Veer Sawarkar Marg, Mumbai, 400 016, India. Department of Radiodiagnosis, **Christian Medical College, Vellore,** 632 004, India. Department of Radiodiagnosis, Sir H N Reliance Foundation Hospital and Research Centre, Prarthana Samaj, Raja Rammohan Roy Road, Mumbai, 400 004, India. Department of Gastroenterology, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, 226 014, India. Department of Radiodiagnosis, Post Graduate Institute of Medical Education and Research, Chandigarh, 160 012, India. Department of Radiodiagnosis, SRM Institutes for Medical Science, 1, Jawaharlal Nehru Salai, Vadapalani, Chennai, 600 026, India. Department of Gastroenterology, PVS Memorial Hospital, Kochi, 682 017, India. Department of Gastroenterology, GB Pant Institute of Medical Education and Research, 1, Jawaharlal Nehru Marg, New Delhi, 110 002, India. Department of Radiodiagnosis, GB Pant Institute of Medical Education and Research, 1, Jawaharlal Nehru Marg, New Delhi, 110 002, India. Department of Gastroenterology, Post Graduate Institute of Medical Education and Research, Chandigarh, 160 012, India. Department of Medical Gastroenterology, Asian Institute of Gastroenterology, 6-3-661, Somajiguda, Hyderabad, 500 082, India. Department of Gastroenterology, KEM Hospital, Acharya Donde Marg, Parel, Mumbai, 400 012, India. Department of Gastroenterology, Aster CMI Hospital, 43/2, New Airport Road, NH.7, Sahakara Nagar, Bengaluru, 560 092, India. Department of Gastroenterology, SN Medical College, Residency Road, Shastri Nagar, Jodhpur, 342 003, India. Department of Gastroenterology, School of Digestive and Liver Diseases, Institute of Post Graduate Medical, Education and Research, Kolkata, 700 020, India. Department of Gastroenterology, Guwahati Medical College, GMC Hospital Road, Bhangagarh, Guwahati, 781 032, India. Department of Gastroenterology, Jawaharlal Nehru Hospital and Research Centre, Hospital Sector, Bhilai, 490 009, India. Department of Gastroenterology, Gleneagles Global Hospitals, 439, Cheran Nagar, Perumbakkam, Chennai, 600 100, India. Department of Gastroenterology, MLN Medical College, Allahabad, 211 002, India.				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Gastroenterology, SMS Medical College, J L N. Marg, Jaipur, 302 004, India. Department of Gastroenterology, Military Hospital, Cantt Area, Jodhpur, 342 006, India. Department of Radiodiagnosis, School of Digestive and Liver Diseases, Institute of Post Graduate Medical, Education and Research, Kolkata, 700 020, India. Department of Gastroenterology, SCB Medical College, Dock Road, Manglabag, Cuttack, 753 007, India. Department of Paediatric Gastroenterology, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, 226 014, India. Institute of Gastroenterology, SRM Institutes for Medical Science, 1, Jawaharlal Nehru Salai, Vadapalani, Chennai, 600 026, India. The Indian Society of Gastroenterology (ISG) Task Force on Inflammatory Bowel Disease and the Indian Radiological and Imaging Association (IRIA) developed combined ISG-IRIA evidence-based best-practice guidelines for imaging of the small intestine in patients with suspected or known Crohn's disease. These 29 position statements, developed through a modified Delphi process, are intended to serve as reference for teaching, clinical practice, and research.				
314.	Khan, N., Lipsa, A., Arunachal, G., Ramadwar, M. and Sarin, R. Novel mutations and phenotypic associations identified through APC, MUTYH, NTHL1, POLD1, POLE gene analysis in Indian Familial Adenomatous Polyposis cohort Sci Rep; 2017, 7 (1): 2214 **Address:** Sarin Lab, Advanced Centre for Treatment, Research and Education in Cancer (ACTREC)-Tata Memorial Centre, Navi Mumbai, India. Homi Bhabha National Institute, Training School Complex, Anushakti Nagar, Mumbai, 400085, India. Clinical Genetics Unit, **Christian Medical College and Hospital, Vellore**, India. Department of Pathology, Tata Memorial Hospital-Tata Memorial Centre, Mumbai, India. Sarin Lab, Advanced Centre for Treatment, Research and Education in Cancer (ACTREC)-Tata Memorial Centre, Navi Mumbai, India. rsarin@actrec.gov.in. Homi Bhabha National Institute, Training School Complex, Anushakti Nagar, Mumbai, 400085, India. rsarin@actrec.gov.in Colo-Rectal Cancer is a common cancer worldwide with 5-10% cases being hereditary. Familial Adenomatous Polyposis (FAP) syndrome is due to germline mutations in the APC or rarely MUTYH gene. NTHL1, POLD1, POLE have been recently reported in previously unexplained FAP cases. Unlike the Caucasian	**INT**	**JAN TO JUN**	**CLINICAL GENETICS UNIT**	**PMID:**28533537 **Impact Factor:**4.259 **H-Index:** 104

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	population, FAP phenotype and its genotypic associations have not been widely studied in several geoethnic groups. We report the first FAP cohort from South Asia and the only non-Caucasian cohort with comprehensive analysis of APC, MUTYH, NTHL1, POLD1, POLE genes. In this cohort of 112 individuals from 53 FAP families, we detected germline APC mutations in 60 individuals (45 families) and biallelic MUTYH mutations in 4 individuals (2 families). No NTHL1, POLD1, POLE mutations were identified. Fifteen novel APC mutations and a new Indian APC mutational hotspot at codon 935 were identified. Eight very rare FAP phenotype or phenotypes rarely associated with mutations outside specific APC regions were observed. APC genotype-phenotype association studies in different geo-ethnic groups can enrich the existing knowledge about phenotypic consequences of distinct APC mutations and guide counseling and risk management in different populations. A stepwise cost-effective mutation screening approach is proposed for genetic testing of south Asian FAP patients.				
315.	Khanna, Soumya, Gupta, Ashish Kumar, Cherian, Anish Jacob, Yadav, Bijesh and Jacob, Paul Mazhuvanchary Post Mastectomy Lymphedema—a Prospective Study of Incidence and Risk Factors Indian Journal of Surgery; 2017, **Address:** 1.Max Super Specialty Hospital, Saket, New Delhi, India 2.**Christian Medical College and Hospital, Vellore**, India The aim of this study is to document the incidence of early lymphedema and study the risk factors influencing post mastectomy lymphedema. It is a prospective cohort study involving 98 adult women who underwent surgery including axillary lymph node dissection for biopsy-proven breast carcinoma. Serial measurements of the arm were taken preoperatively and postoperatively at 3, 6 and 12 months. Lymphedema was diagnosed if there was an increase in girth by more than 2 cm in the concerned limb. All patients received standard lymphedema prevention advice. Risk factors assessed were age, body mass index, comorbid conditions, hypertension, medications, socioeconomic status, upper limb symptoms, laterality of disease, type of surgery, stage of the disease, histopathology, node status, wound complication, receptor status, seroma volume, duration of seroma drainage, radiotherapy, chemotherapy, post radiation skin reaction and post therapy weight gain. The statistical analysis was done using chi-square test with SPSS version 16. The incidence of lymphedema was 23.47%. The univariate analysis showed that	**NAT**	**JUL TO DEC**	**PLASTIC SURGERY UNIT-II & ENDOCRINE SURGERY**	**Impact Factor:**0.256

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	prolonged or high volume seroma, taxane-based chemotherapy, radiotherapy to axilla and skin necrosis following radiation were significantly associated with lymphedema. In the multivariate analysis, only post radiation skin necrosis was significant. PMC				
316.	Kharkongor, Meban, Mishra, Ajay, Ninan, K and Iyadurai, Ramya Early use of intravenous N-acetylcysteine in treatment of acute yellow phosphorus poisoning Current Medical Issues; 2017, 15 (2): 136-138 **Address:** Department of Internal Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India Rodenticides remain an important cause of morbidity and mortality among patients with deliberate self-harm. Yellow phosphorus is an important class of rodenticide due to its high toxic nature and is associated with a high mortality rate. The absence of any specific antidote is an important factor for poor prognosis among those who consume this poison. We report a case of acute liver injury secondary to yellow phosphorus poisoning which was successfully managed with intravenous N-acetylcysteine.	**NAT**	**JAN TO JUN**	**MEDICINE UNIT V**	**Not Indexed in PubMed**
317.	Kisku, S. Orbit technique in malrotation with non-obstructive volvulus: A novel technique of devolvulation Asian J Endosc Surg; 2017, 10 (2): 213-215 **Address:** Department of Paediatric Surgery, **Christian Medical College, Vellore,** India. **INTRODUCTION:** Volvulus may be noted in up to two-thirds of cases involving malrotation beyond infancy. Laparoscopic devolvulation has been described as a frustrating procedure because of restricted visualization. Here, a setup and technique that address these concerns are proposed. **MATERIALS AND SURGICAL TECHNIQUE:** Three boys (median age: 7 years) who had been diagnosed preoperatively with malrotation underwent laparoscopic exploration and devolvulation for volvulus found intraoperatively. The children were placed in a	**INT**	**JAN TO JUN**	**PAEDIATRIC SURGERY**	**PMID:**28547930 **Impact Factor:**0.910 **H-Index:** 10

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	dorsal supine modified lithotomy position. Four 5-mm ports were inserted-one umbilically, one in the suprapubic region, and one in both the right and left iliac. After the volvulus was inspected, the right iliac atraumatic grasper was placed at the root of the mesentery. The bowel was devolvulated counterclockwise with the grasper used as a pivot-that is, the orbit technique. Once derotated, the rest of the operation proceeded with the division of Ladd's bands, the widening of the mesentery, and appendectomy. DISCUSSION: Devolvulation was successful in all three boys. The orbit technique is a useful devolvulation technique in non-obstructive volvulus when other techniques fail.				
318.	Kodiatte, T. A., George, S. V., Chacko, R. T. and Ramakrishna, B. Malignant melanocytic neoplasm of pancreas with liver metastasis: Is it malignant melanoma or clear cell sarcoma? Indian J Pathol Microbiol; 2017, 60 (1): 102-104 **Address:** Department of General Pathology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Surgery, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Medical Oncology, **Christian Medical College, Vellore,** Tamil Nadu, India. Malignant melanocytic neoplasm, usually seen in soft tissues, is rare in a visceral location and presents as a diagnostic dilemma. We present a case of pancreatic malignant melanocytic neoplasm with liver metastasis. A 58-year-old man presented with left upper abdominal swelling and loss of appetite. Imaging revealed a large mass arising from the pancreatic tail, and this was diagnosed as malignant neoplasm with melanocytic differentiation on biopsy with the possible differentials of malignant melanoma, clear cell sarcoma (CCS), and perivascular epithelioid cell neoplasm. The patient underwent distal pancreatectomy and splenectomy for the same. Follow-up imaging 6 months later showed a metastatic liver lesion, for which he also underwent a liver resection. BRAF mutational analysis was found to be negative. Both CCS and malignant melanoma have similar morphological features and melanocytic differentiation, but each harbors a distinct genetic background. Differentiation of both has diagnostic and therapeutic implications.	**NAT**	**JAN TO JUN**	**GENERAL PATHOLOGY, SURGERY, MEDICAL ONCOLOGY**	**PMID:**28195103 **Impact Factor:**0.616 **H-Index:** 25
319.	Kohli, S., Pasangulapati, S. B., Yoganathan, S., Rynjah, G. L., Prabhakar, A. T.,	**NAT**	**JAN TO**	**NEUROSCIEN**	**PMID:**28615895

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Aaron, S., Alexander, M. and Mathew, V. Study of Refractory Status Epilepticus from a Tertiary Care Center Ann Indian Acad Neurol; 2017, 20 (2): 116-121 **Address:** Department of Neurosciences, **Christian Medical College, Vellore,** Tamil Nadu, India. **OBJECTIVES:** To determine the proportion of refractory status epilepticus (RSE) and super-RSE (SRSE) among patients with status epilepticus (SE) and to analyze RSE and non-RSE (NRSE) in terms of etiology and predictors for RSE. **MATERIALS AND METHODS:** Patients were identified from discharge summaries database with keywords of SE and records of the portable electroencephalogram (EEG) machine from January 2011 to March 2016. **RESULTS:** Two hundred and eighteen events were included in the study with 114 (52.3%) males, bimodal age preponderance age <5 years 30%, and second peak in age 15-65 years 52.8%, preexisting seizures were present in 34.4% (n = 75). Nearly 77.1% had NRSE (n = 168) and 22.9% had RSE (n = 50). This included 17 patients with SRSE (n = 17, 7.8% of all SE). Central nervous system (CNS) infection was a single largest etiological group in SE (69/218, 31.7%). In RSE, autoimmune encephalitis (17/50) and CNS infection (13/50) were the largest groups. De novo seizures (P = 0.007), low sensorium at admission (P = 0.001), low albumin at admission (P = 0.002), and first EEG being abnormal (P = 0.001) were risk factors on bivariate analysis. An unfavorable status epilepticus severity score (STESS) was predictive for RSE (P = 0.001). On multivariate analysis, de novo seizures (P = 0.009) and abnormal EEG at admission (P = 0.03) were predictive for RSE. **CONCLUSIONS:** Fifty patients had RSE (22.9%), of which 17 went on to become SRSE (7.8%). Unfavorable STESS score was predictive for RSE on bivariate analysis. On multivariate analysis, de novo seizures and abnormal initial EEG were predictors of RSE.		**JUN**	**CES**	**Impact Factor:**0.950 **H-Index:** 17
320.	Kokavec, J., **Horo, S.,** Chan, W. O., Min, S. H., Tan, M. H., Grigg, J., Gilhotra, J. S., Newland, H. S., Durkin, S. R. and Casson, R. J. BSS Plus compared to the vitreous of non-diabetics and diabetics Clin Exp Ophthalmol; 2017, 45 (6): 656-657 doi: 10.1111/ceo.12923. Epub 2017 Mar 21. **Address:** University of Adelaide, Adelaide, South Australia, Australia. University of Sydney, Sydney, New South Wales, Australia.	**INT**	**JUL TO DEC**	**OPHTHALMOLOGY**	**PMID:**28170153 **Indexed in Scopus, Science Citation Index Impact Factor:**1.88

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
321.	Konduru, V., Thomas, C. T. and Gaikwad, P. Curious case of the bilaterally absent omohyoid muscle Br J Oral Maxillofac Surg; 2017, 55 (6): 639-640 **Address:** Department of Surgery, Unit-1/Head and Neck Surgery, **Christian Medical College, Vellore** 632004, India.	**INT**	**JUL TO DEC**	**SURGERY, UNIT-1/HEAD AND NECK SURGERY**	**PMID:**27993502 **Impact Factor:**1.218 **H-Index:** 61
322.	Korula, A., Abraham, A., Abubacker, F. N., Viswabandya, A., Lakshmi, K. M., Abraham, O. C., Rupali, P., Varghese, G. M., Michael, J. S., Srivastava, A., Mathews, V. and George, B. Invasive fungal infection following chemotherapy for acute myeloid leukaemia-Experience from a developing country Mycoses; 2017, 60 (10): 686-691 **Address:** Department of Haematology, **Christian Medical College, Vellore,** India. Department of Infectious Diseases, **Christian Medical College, Vellore,** India. Department of Microbiology and Mycology, **Christian Medical College, Vellore,** India. The incidence of invasive fungal infections (IFI) is believed to be higher in patients with acute myeloid leukaemia (AML) undergoing chemotherapy in non-HEPA-filtered rooms. The aim of this study is to review the incidence of IFI in a large cohort of patients with AML treated at a single centre in India. Two hundred and twenty-two patients with AML treated with either induction chemotherapy or salvage chemotherapy between 2008 and 2013 were studied retrospectively. IFI was defined as per the revised EORTC-MSG criteria. Data on type of chemotherapy, prophylactic strategies, engraftment (ANC>500), the presence of IFI and survival were collected. IFI was diagnosed in 86 patients (38.7%) with proven IFI in 12 (5.4%). Use of posaconazole prophylaxis (P=.001) was the only factor associated with reduced incidence of IFI. Survival in patients with proven IFI was lower than those without proven IFI, but not statistically significant (59.4% vs 78.5%; P=.139). There is a high incidence of IFI during induction chemotherapy for acute myeloid leukaemia in developing countries. Posaconazole prophylaxis was associated with a significantly lower incidence of IFI. Optimal yet cost-effective strategies for prevention and early diagnosis of IFI are required to improve survival in patients undergoing chemotherapy for AML.	**INT**	**JUL TO DEC**	**HAEMATOLOGY, INFECTIOUS DISEASES, MICROBIOLOGY AND MYCOLOGY**	**PMID:**28736936 **Impact Factor:**2.252 **H-Index:** 58

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
323.	Korula, A., Pn, N., Devasia, A., Lakshmi, K. M., Abraham, A., Sindhuvi, E., George, B., Srivastava, A. and Mathews, V. Second Hematopoietic Stem Cell Transplant for Thalassemia Major: Improved Clinical Outcomes with a Treosulfan-Based Conditioning Regimen Biol Blood Marrow Transplant; 2018, 24 (1): 103-108 **Address:** Department of Haematology, **Christian Medical College and Hospital, Vellore**, India. Department of Haematology, **Christian Medical College and Hospital, Vellore**, India. Electronic address: vikram@cmcvellore.ac.in. Graft rejection (GR) after allogeneic stem cell transplantation (allo-SCT) occurs in 10% to 20% of patients with beta-thalassemia major (TM). There are limited data on the clinical profile and long-term outcome of patients who have had a GR. We undertook a retrospective analysis of patients who had a graft failure after allo-SCT for TM at our center. From October 1991 to June 2016, 55 of 506 patients (11%) transplanted for TM had a graft failure. An additional 7 patients with graft failure after allo-SCT done at other centers were referred to us for a second transplant. The median age was 8 years (range, 1 to 19), and there were 38 males (61.2%). Thirty-two patients (52.4%) were primary graft failures (15 with aplasia and 17 with autologous recovery) and 30 (47.6%) were secondary graft failures (5 with aplasia and 25 with autologous recovery). On conventional risk stratification 40 patients (64.5%) were class III. Seventeen patients (53.12%) with primary graft failure and 16 (53.3%) with secondary graft failure did not receive a second transplant. Twenty-nine patients (46%) with GR underwent a second allo-SCT. With the exception of 1 patient (first allo-SCT with an unrelated cord blood product), the donor for the second transplant was the same as the first transplant. Conditioning regimen for the second SCT was busulfan-based myeloablative (MAC) in 7 patients (24%), treosulfan-based MAC in 12 patients (41.3%), and the remaining received non-MAC regimens in view of pancytopenia and perceived inability to tolerate MAC. None of the patients conditioned with a treosulfan-based regimen had a GR, although 1 patient died with complications secondary to chronic graft-versus-host disease. Of the remaining 17 patients, 10 died after the second GR and 3 of regimen-related toxicity. Four are alive, of which 1 has recurrent TM and the rest are well and transfusion independent at 55, 80, and 204 months, respectively, from second transplant (all busulfan-based MAC). On a univariate analysis a nontreosulfan-based conditioning regimen and time from GR to second	**INT**	**JUL TO DEC**	**HAEMATOLOGY**	**PMID:**29032269 **Impact Factor:**4.704 **H-Index:** 99

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	transplant of <1 year was significantly associated with an adverse impact. However, on a multivariate analysis only a nontreosulfan-based regimen was associated with a significant adverse impact on event-free survival (HR, 11.5; 95% CI, 1.13 to 116.4; P = .039). In conclusion, there has been a significant improvement in clinical outcomes in our experience with the use of a treosulfan-based reduced-toxicity MAC regimen for second allo-SCT for TM. It would be reasonable, where feasible, to defer the second transplant by a year after the first GR.				
324.	Korula, Pritish, Mariappan, Ramamani, James, Justin, Kumar, Prashant and Korula, Grace Awareness during anaesthesia for surgery requiring evoked potential monitoring: A pilot study Journal of Neuroanaesthesiology and Critical Care; 2017, 4 (1): 36-41 **Address:** 1 Department of Anaesthesia, **Christian Medical College, Vellore,** Tamil Nadu, India 2 Department of Anaesthesiology, Pt. B.D. Sharma PGIMS, Rohtak, Haryana, India Background:Evoked potential monitoring such as somatosensory-evoked potential (SSEP) or motor-evoked potential (MEP) monitoring during surgical procedures in proximity to the spinal cord requires minimising the minimum alveolar concentrations (MACs) below the anaesthetic concentrations normally required (1 MAC) to prevent interference in amplitude and latency of evoked potentials. This could result in awareness. Our primary objective was to determine the incidence of awareness while administering low MAC inhalational anaesthetics for these unique procedures. The secondary objective was to assess the adequacy of our anaesthetic technique from neurophysiologist's perspective. Methods:In this prospective observational pilot study, 61 American Society of Anesthesiologists 1 and 2 patients undergoing spinal surgery for whom intraoperative evoked potential monitoring was performed were included; during the maintenance phase, 0.7-0.8 MAC of isoflurane was targeted. We evaluated the intraoperative depth of anaesthesia using a bispectral (BIS) index monitor as well as the patients response to surgical stimulus (PRST) scoring system. Post-operatively, a modified Bruce questionnaire was used to verify awareness. The adequacy of evoked potential readings was also assessed. Results:Of the 61 patients, no patient had explicit awareness. Intraoperatively, 19 of 61 patients had a BIS value of above sixty at	**NAT**	**JAN-JUN**	**ANESTHESIA**	NOT INDEXED IN PUBMED

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	least once, during surgery. There was no correlation with PRST scoring and BIS during surgery. Fifty-four out of 61 patient's evoked potential readings were deemed 'good' or 'fair' for the conduct of electrophysiological monitoring. Conclusions:This pilot study demonstrates that administering low MAC inhalational anaesthetics to facilitate evoked potential monitoring does not result in explicit awareness. However, larger studies are needed to verify this. The conduct of SSEP electrophysiological monitoring was satisfactory with the use of this anaesthetic technique. However, the conduct of MEP monitoring was satisfactory, only in patients with Nurick Grade 1 and 2. The MEP response was poor in patients with Nurick Grade 4 and 5. PMC				
325.	**Korula, Sophy**, Owens, Penny, Charlton, Amanda and Bhattacharya, Kaustuv Rare Case of Hepatic Gaucheroma in a Child on Enzyme Replacement Therapy Journal of Inherited Metabolic Disease(JIMD) Reports; 2017, 32 101-104 **Address:** S. Korula (*) : P. Owens: A. Charlton : K. Bhattacharya Genetic Metabolic Disorders Service, Children's Hospital at Westmead, Sydney, NSW 2145, Australia e-mail: jsophyhr@yahoo.co.in Background: We present a 6 year old boy with type I Gaucher treated from 16 months with ERT, developing focal Gaucheroma in the liver at 3.5 years. Case: The subject presented at 13 months of age with anaemia, thrombocytopenia and hepatosplenomegaly. Gaucher disease was confirmed by leucocyte enzyme assay. A homozygous change: c.1193G>A (p.Arg398Gln) in the GBA gene was identified. He had normal neurology with normal saccades. Imiglucerase was administered at 60 IU/kg/fortnight from 15 months as per Australian regulations with good clinical response. At 3.5 years hepatic ultrasound demonstrated a nodular cystic lesion measuring 7 × 5.3 × 5.1 cm in the right lobe of liver, confirmed on MRI. Biopsy demonstrated acellular hyaline necrosis, portal–portal bridging fibrosis and nodules of Gaucher cells. Cystic fluid comprised necrotic debris and Gaucher cells. Further evaluation over 18 months including repeat MRI, biopsy, alpha-fetoprotein monitoring and whole-body FDG-Pet scan demonstrate no malignancy. Conclusion: GD is the most common lysosomal storage disorder. The aetiology, natural history and optimal management strategy of rare Gaucheroma in paediatric cases has not been defined particularly in regards to malignancy risk.	**INT**	**JUL TO DEC**	**PEDIATRICS UNIT II**	**PMID:PMC**5362560

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
326.	Kosek, M. N., Lee, G. O., Guerrant, R. L., Haque, R., Kang, G., Ahmed, T., Bessong, P., Ali, A., Mduma, E., Yori, P. P., Faubion, W. A., Lima, A. A. M., Olortegui, M. P., Mason, C., **Babji, S.,** Singh, R., Qureshi, S., Kosek, P. S., Samie, A., Pascal, J., Shrestha, S., Mccormick, B. J. J., Seidman, J. C., Lang, D. R., Zaidi, A., Caulfield, L. E. and Gottlieb, M. Age and Sex Normalization of Intestinal Permeability Measures for the Improved Assessment of Enteropathy in Infancy and Early Childhood: Results from the MAL-ED Study J Pediatr Gastroenterol Nutr; 2017, **Address:** *Department of International Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USAdaggerFogarty International Center/National Institutes of Health, Bethesda, Maryland, USAdouble daggerDepartment of Global Community Health and Behavioral Sciences, Tulane University, New Orleans, Louisiana, USA section signUniversity of Virginia, Charlottesville, Virginia paragraph signicddr, b, Dhaka, Bangladesh||**Christian Medical College, Vellore,** India**University of Venda, Thohoyandou, South AfricadaggerdaggerCenter of Excellence in Women and Child Health, the Aga Khan University, Karachi, Pakistandouble daggerdouble daggerHaydom Lutheran Hospital, Haydom, Tanzania section sign section signDivision of Gastroenterology and Hepatology, Mayo Clinic, Rochester, Minnesota, USA paragraph sign paragraph signUniversidade Federal do Ceara, Fortaleza, Brazil||||A.B. PRISMA, Iquitos, Peru***Walter Reed/AFRIMS Research Unit, Kathmandu, NepaldaggerdaggerdaggerImmunochemical Core Laboratory, Mayo Clinic, Rochester, Minnesota, USAdouble daggerdouble daggerdouble daggerPain Consultants of Oregon, Eugene, OR, 97401, USA section sign section sign section signFoundation for the NIH, Bethesda, MD, USA paragraph sign paragraph sign paragraph signMembers and affiliations of Network available as Supplemental Material 1. **OBJECTIVES:** To describe changes in intestinal permeability in early childhood in diverse epidemiologic settings. **METHODS:** In a birth cohort study the lactulose:mannitol (LM) test was administered to 1,980 children at four time points in the first 24 months of life in eight countries. Data from the Brazil site with an	**INT**	**JAN TO JUN**	**GASTROINTESTINAL SCIENCES**	**PMID:**28471910 **Impact Factor:**2.799 **H-Index:** 108

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	incidence of diarrhea similar to that seen in the U.S. and no growth faltering was used as an internal study reference to derive age- and sex-specific Z-scores for mannitol and lactulose recoveries and the lactulose mannitol ratio. **RESULTS:** 6,602 tests demonstrated mannitol recovery, lactulose recovery, and the L:M ratio were associated with country, sex, and age. There was heterogeneity in the recovery of both probes between sites with mean mannitol recovery ranging for 1.34%-to 5.88%, lactulose recovery of 0.19%-0.58%, and L:M ratios 0.10-0.17 in boys of 3 months of age across different sites. We observed strong sex-specific differences in both mannitol and lactulose recovery, with boys having higher recovery of both probes. Alterations in intestinal barrier function increased in most sites from 3-9 months of age and plateaued or diminished from 9-15 months of age. **CONCLUSIONS:** Alterations in recovery of the probes differ markedly in different epidemiologic contexts in children living in the developing world. The rate of change in the L:M-Z ratio was most rapid and consistently disparate from the reference standard in the period between 6 and 9 months of age suggesting that this is a critical period of physiologic impact of enteropathy in these populations.This is an open access article distributed under the Creative Commons Attribution License 4.0 (CCBY), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. http://creativecommons.org/licenses/by/4.0.				
327.	Kosek, Margaret N., Ahmed, Tahmeed, Bhutta, Zulfiquar, Caulfield, Laura, Guerrant, Richard, Houpt, Eric, **Kang, Gagandeep**, Kosek, Margaret, Lee, Gwenyth, Lima, Aldo, Mccormick, Benjamin J. J., Platts-Mills, James, Seidman, Jessica, Blank, R., Gottlieb, Michael, Knobler, Stacey L., Lang, Dennis R., Miller, Mark A., Tountas, Karen H., Bhutta, Zulfiqar A., Checkley, William, Guerrant, Richard L., Mason, Carl J., Murray-Kolb, Laura E., Petri, William A., Jr., Seidman, Jessica C., Bessong, Pascal, Haque, Rashidul, John, Sushil, Lima, Aldo A. M., Mduma, Estomih R., Oria, Reinaldo B., Shrestha, Prakash Sunder, Shrestha, Sanjaya Kumar, Svensen, Erling, Zaidi, Anita K. M., Abreu, Claudia B., Acosta, Angel Mendez, Ahmed, Imran, Ahmed, A. M. Shamsir, Ali, Asad, Ambikapathi, Ramya, Barrett, Leah, Bauck, Aubrey, Bayyo, Eliwaza, Bodhidatta, Ladaporn, Bose, Anuradha, Carreon, J. Daniel, Chandyo, Ram Krishna, Charu, Vivek, Costa, Hilda, Dillingham, Rebecca, Di Moura, Alessandra, Doan, Viyada, Quirino Filho, Jose, Graham, Jhanelle, Hoest, Christel, Hossain, Iqbal, Islam, Munirul, Jennifer, M. Steffi, Kaki, Shiny, Koshy, Beena, Leite, Alvaro M., Lima, Nolia L., Maciel, Bruna L. L., Mahfuz, Mustafa, Mahopo, Cloupas, Maphula, Angelina, Mcgrath, Monica, Mohale, Archana, Moraes, Milena, Mota, Francisco S., Muliyil, Jayaprakash, Mvungi,	**INT**	**JUL TO DEC**	**WELLCOME RESEARCH UNIT**	**PMID:**28396264 **PMCID:PMC5405169** **WOS:**000402105100021 **Impact Factor:**1.370 **H-Index:** 17

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Regisiana, Nayyar, Gaurvika, Nyathi, Emanuel, Olortegui, Maribel Paredes, Oria, Reinaldo, Vasquez, Angel Orbe, Pan, William K., Pascal, John, Patil, Crystal L., Pendergast, Laura, Pinedo, Silvia Rengifo, Psaki, Stephanie, Raghava, Mohan Venkata, Ramanujam, Karthikeyan, Rasheed, Muneera, Rasmussen, Zeba A., Richard, Stephanie A., Rose, Anuradha, Roshan, Reeba, Schaefer, Barbara, Scharf, Rebecca, Sharma, Srujan L., Shrestha, Binob, Shrestha, Rita, Simons, Suzanne, Soares, Alberto M., Mota, Rosa M. S., Soofi, Sajid, Strand, Tor, Tofail, Fahmida, Thomas, Rahul J., Turab, Ali, Ulak, Manjeswori, Wang, Vivian, Yarrot, Ladislaus, Yori, Pablo Penataro, Alam, Didar, Amour, Caroline, Chavez, Cesar Banda, Babji, Sudhir, De Burga, Rosa Rios, Flores, Julian Torres, Gratz, Jean, George, Ajila T., Hariraju, Dinesh, Havt, Alexandre, Karunakaran, Priyadarshani, Lazarus, Robin P., Lima, Ila F., Mondal, Dinesh, Medeiros, Pedro H. Q. S., Nshama, Rosemary, Quetz, Josiane, Qureshi, Shahida, Raju, Sophy, Ramachandran, Anup, Ramadas, Rakhi, Ross, A. Catharine, Salas, Mery Siguas, Samie, Amidou, Schulze, Kerry, Sundaram, Shanmuga E., Swema, Buliga Mujaga, Trigoso, Dixner Rengifo, Investigators, Mal-Ed Network, Data Anal, Grp and Sample Processing, Management Causal Pathways from Enteropathogens to Environmental Enteropathy: Findings from the MAL-ED Birth Cohort Study Ebiomedicine; 2017, 18 109-117 Background: Environmental enteropathy (EE), the adverse impact of frequent and numerous enteric infections on the gut resulting in a state of persistent immune activation and altered permeability, has been proposed as a key determinant of growth failure in children in low- and middle-income populations. A theory-driven systems model to critically evaluate pathways through which enteropathogens, gut permeability, and intestinal and systemic inflammation affect child growth was conducted within the framework of the Etiology, Risk Factors and Interactions of Enteric Infections and Malnutrition and the Consequences for Child Health and Development (MAL-ED) birth cohort study that included children from eight countries. Methods: Non-diarrheal stool samples (N-22,846) from 1253 children from multiple sites were evaluated for a panel of 40 enteropathogens and fecal concentrations of myeloperoxidase, alpha-1-antitrypsin, and neopterin. Among these same children, urinary lactulose: mannitol (L:M) (N=6363) and plasma alpha-1-acid glycoprotein (AGP) (N=2797) were also measured. The temporal sampling design was used to create a directed acyclic graph of proposed mechanistic pathways between enteropathogen detection in non-diarrheal stools,				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	biomarkers of intestinal permeability and inflammation, systemic inflammation and change in length- and weight- for age in children 0-2 years of age. Findings: Children in these populations had frequent enteric infections and high levels of both intestinal and systemic inflammation. Higher burdens of enteropathogens, especially those categorized as being enteroinvasive or causing mucosal disruption, were associated with elevated biomarker concentrations of gut and systemic inflammation and, via these associations, indirectly associated with both reduced linear and ponderal growth. Evidence for the association with reduced linear growth was stronger for systemic inflammation than for gut inflammation; the opposite was true of reduced ponderal growth. Although Giardia was associated with reduced growth, the association was not mediated by any of the biomarkers evaluated. Interpretation: The large quantity of empirical evidence contributing to this analysis supports the conceptual model of EE. The effects of EE on growth faltering in young children were small, but multiple mechanistic pathways underlying the attribution of growth failure to asymptomatic enteric infections had statistical support in the analysis. The strongest evidence for EE was the association between enteropathogens and linear growth mediated through systemic inflammation. Funding: Bill & Melinda Gates Foundation. (C) 2017 The Authors. Published by Elsevier B.V. KEYWORDS: Child growth; Child health; Enteropathogen; Enteropathy; Stunting; Undernutrition. DOI:10.1016/j.ebiom.2017.02.024				
328.	Koshy, Maria, Mishra, Ajay and Iyadurai, Ramya Ruptured hydatid cyst: An unusual cause of pneumobilia Current Medical Issues; 2017, 15 (1): 57-58 **Address:** Department of Internal Medicine, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India Echinococcosis or hydatid disease caused by the larval stage of cestodes of the genus Echinococcus granulosus, produces cystic lesions in various organs, the liver being the most common site. Symptoms are produced by mass effect, biliary obstruction, or secondary infection in most instances. Cystic rupture is an uncommon cause of symptoms. We report the uncommon occurrence of pneumobilia in the setting of hydatid cyst rupture with secondary infection by gas producing organisms.	**NAT**	**JAN TO JUN**	**INTERNAL MEDICINE UNIT V**	**Not Indexed in PubMed**
329.	Kulkarni, P. S., Desai, S., Tewari, T., Kawade, A., Goyal, N., Garg, B. S., Kumar, D., Kanungo, S., Kamat, V., Kang, G., Bavdekar, A., Babji, S., Juvekar, S., Manna,	**INT**	**JUL TO DEC**	**WELLCOME TRUST**	**PMID:**28967523 **PMCID:**5651219

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	B., Dutta, S., Angurana, R., Dewan, D., Dharmadhikari, A., Zade, J. K., Dhere, R. M., Fix, A., Power, M., Uprety, V., Parulekar, V., Cho, I., Chandola, T. R., Kedia, V. K., Raut, A. and Flores, J. A randomized Phase III clinical trial to assess the efficacy of a bovine-human reassortant pentavalent rotavirus vaccine in Indian infants Vaccine; 2017, 35 (45): 6228-6237 **Address:** Serum Institute of India Pvt Ltd, Pune, India. Electronic address: drpsk@seruminstitute.com. Serum Institute of India Pvt Ltd, Pune, India. PATH, Delhi, India. Shirdi Saibaba Rural Hospital, Vadu, India. Center for Health Research & Development, Society for Applied Studies, New Delhi, India. Mahatma Gandhi Institute of Medical Sciences, Sewagram, India. Government Medical College, Jammu, India. National Institute of Cholera & Enteric Diseases, Kolkata, India. Kasturba Medical College, Manipal, India. **Christian Medical College, Vellore,** India. PATH, Washington D.C., United States. DiagnoSearch Pvt Ltd, Mumbai, India. Rotavirus is the most common cause of moderate-to-severe infant diarrhoea in developing countries, resulting in enormous morbidity, mortality, and economic burden. A bovine-human reassortant pentavalent rotavirus vaccine (BRV-PV) targeting the globally most common strains was developed in India and tested in a randomized, double-blind, placebo-controlled end-point driven Phase III efficacy clinical trial implemented at six sites across India. Infants 6 to 8weeks of age were randomized (1:1) to receive three oral doses of BRV-PV or placebo at 6, 10, and 14weeks of age along with routine vaccines. Home visit surveillance was conducted to detect severe rotavirus gastroenteritis (SRVGE) and safety outcomes until the children reached two years of age. A total of 3749 infants received BRV-PV while 3751 received placebo. At the time of the primary end-point (when the minimum number of cases needed for analysis were accrued) the vaccine efficacy against SRVGE was 36% (95% CI 11.7, 53.6, p=0.0067) in the per protocol (PP) analysis, and 41.9% (95% CI 21.1, 57.3, p=0.0005) in the intent to treat (ITT) analysis. Vaccine efficacy over the entire follow-up period (until children reached two years			**RESEARCH LABORATORY**	**Impact Factor:**3.235 **H-Index:** 151

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	of age) was 39.5% (95% CI 26.7, 50, p<0.0001) in the PP analysis and 38.8% (95% CI, 26.4, 49, p<0.0001) in the ITT analysis. Vaccine efficacy against the very severe rotavirus cases (VSRVGE, Vesikari score>/=16) was 60.5% (95% CI 17.7, 81, p=0.0131) at the time of the primary analysis and 54.7% (95% CI 29.7, 70.8, p=0.0004) for the complete follow-period in the PP population. The incidence of solicited, unsolicited, and serious adverse events were similar in both the vaccine and placebo groups. Likewise, the number of intussusceptions and deaths were similar between both groups. Thus, BRV-PV is an effective, well tolerated and safe vaccine in Indian infants. (Trial registration: Clinical Trials.Gov [NCT 02133690] and Clinical Trial Registry of India [CTRI/2013/05/003667]).				
330.	Kumar, J. G., Abhilash, K. P., Saya, R. P., Tadipaneni, N. and Bose, J. M. A retrospective study on epidemiology of hypoglycemia in Emergency Department Indian J Endocrinol Metab; 2017, 21 (1): 119-124 **Address:** Department of Emergency Medicine and Trauma, Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry, Tamil Nadu, India. Department of Accident and Emergency Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of General Medicine, Kanachur Institute of Medical Sciences, Mangalore, Karnataka, India. Department of Clinical Pharmacology, **Christian Medical College, Vellore,** Tamil Nadu, India. Data Analytics Consultant, Bengaluru, Karnataka, India. **BACKGROUND:** Hypoglycemia is one among the leading causes for Emergency Department (ED) visits and is the most common and easily preventable endocrine emergency. This study is aimed at assessing the incidence and elucidating the underlying causes of hypoglycemia. **MATERIALS AND METHODS:** A retrospective, observational study which included patients registering in ED with a finger prick blood glucose </=60 mg/dl at the time of arrival. All patients aged above 15 years with the above inclusion criteria during the period of August 2010 to July 2013 were selected. The study group was categorized based on diabetic status into diabetic and nondiabetic groups. **RESULTS:** A total of 1196 hypoglycemic episodes encountered at the ED during the study period were included, and of which 772 with complete data were analyzed. Underlying causes for hypoglycemia in the diabetic group (535) mainly included medication related	**NAT**	**JAN TO JUN**	**ACCIDENT AND EMERGENCY MEDICINE, CLINICAL PHARMACOLOGY**	**PMID:**28217510 **Impact Factor:**NA **H-Index:** 7

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	320 (59.81%), infections 108 (20.19%), and chronic kidney disease 61 (11.40%). Common underlying causes of hypoglycemia in nondiabetic group (237, 30.69%) included infections 107 (45.15%), acute/chronic liver disease 42 (17.72%), and malignancies 22 (9.28%). Among diabetic subjects on antidiabetic medications (n = 320), distribution over 24 h duration clearly reported two peaks at 8th and 21st h. The incidence of hypoglycemia and death per 1000 ED visits were 16.41 and 0.73 in 2011, 16.19 and 0.78 in 2012, 17.20 and 1.22 in 2013 with an average of 16.51 and 0.91, respectively. **CONCLUSION:** Bimodal distribution with peaks in incidences of hypoglycemic attacks at 8th and 21st h based on hourly distribution in a day can be correlated with the times just before next meal. None of the patients should leave ED without proper evaluation of the etiology of hypoglycemia and the problem should be addressed at each individual level. Increasing incidence of death over the years is alarming, and further studies are needed to conclude the root cause.				
331.	Kumar, K. Suresh, Samuelkamaleshkumar, Selvaraj, Viswanathan, Anand and Macaden, Ashish S. Cognitive rehabilitation for adults with traumatic brain injury to improve occupational outcomes Cochrane Database of Systematic Reviews; 2017, (6): Background Cognitive impairment in people with traumatic brain injury (TBI) could affect multiple facets of their daily functioning. Cognitive rehabilitation brings about clinically significant improvement in certain cognitive skills. However, it is uncertain if these improved cognitive skills lead to betterments in other key aspects of daily living. We evaluated whether cognitive rehabilitation for people with TBI improves return to work, independence in daily activities, community integration and quality of life. Objectives To evaluate the effects of cognitive rehabilitation on return to work, independence in daily activities, community integration (occupational outcomes) and quality of life in people with traumatic brain injury, and to determine which cognitive rehabilitation strategy better achieves these outcomes. Search methods We searched CENTRAL (the Cochrane Library; 2017, Issue 3), MEDLINE (OvidSP), Embase (OvidSP), PsycINFO (OvidSP), and clinical trials registries up to 30 March 2017. Selection criteria We identified all available randomized controlled trials of cognitive rehabilitation compared with any other non-pharmacological intervention for people with TBI. We included studies that reported at least one outcome related to : return to work, independence in activities of daily living (ADL), community integration and quality of life. Data	**INT**	**JUL TO DEC**	**PMR, NEUROSURGERY**	**PMID:**28631816 **WOS:**000408840400010 **Impact Factor:**6.124 **H-Index:** 189

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	collection and analysis Two review authors independently selected trials. We used standard methodological procedures expected by Cochrane. We evaluated heterogeneity among the included studies and performed meta-analysis only when we could include more than one study in a comparison. We used the online computer programme GRADEpro to assess the quality of evidence, and generate 'Summary of findings' tables. Main results We included nine studies with 790 participants. Three trials (160 participants) compared cognitive rehabilitation versus no treatment, four trials (144 participants) compared cognitive rehabilitation versus conventional treatment, one trial (120 participants) compared hospital-based cognitive rehabilitation versus home programme and one trial (366 participants) compared one cognitive strategy versus another. Among the included studies, we judged three to be of low risk of bias. There was no difference between cognitive rehabilitation and no intervention in return to work (risk ratio (RR) 1.80, 95% confidence interval (CI) 0.74 to 4.39, 1 study; very low-quality evidence). There was no difference between biweekly cognitive rehabilitation for eight weeks and no treatment in community integration (Sydney Psychosocial Reintegration Scale): mean difference (MD) -2.90, 95% CI -12.57 to 6.77, 1 study; low-quality evidence). There was no difference in quality of life between cognitive rehabilitation and no intervention immediately following the 12-week intervention(MD 0.30, 95% CI -0.18 to 0.78, 1 study; low-quality evidence). No study reported effects on independence in ADL. There was no difference between cognitive rehabilitation and conventional treatment in return to work status at six months' followup in one study (RR 1.43, 95% CI 0.87 to 2.33; low-quality evidence); independence in ADL at three to four weeks' follow-up in two studies (standardized mean difference (SMD) -0.01, 95% CI -0.62 to 0.61; very low-quality evidence); community integration at three weeks' to six months' follow-up in three studies (Community Integration Questionnaire: MD 0.05, 95% CI -1.51 to 1.62; lowquality evidence) and quality of life at six months' follow-up in one study (Perceived Quality of Life scale: MD 6.50, 95% CI -2.57 to 15.57; moderate-quality evidence). For active duty military personnel with moderate-to-severe closed head injury, there was no difference between eight weeks of cognitive rehabilitation administered as a home programme and hospital-based cognitive rehabilitation in achieving return to work at one year' follow-up in one study (RR 0.95, 95% CI 0.85 to 1.05; moderate-quality evidence). The study did not report effects on independence in ADL, community integration or quality of life. There was no difference between one cognitive rehabilitation strategy (cognitive didactic) and another (functional experiential) for adult veterans or active duty military service				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	personnel with moderate-to-severe TBI (one study with 366 participants and one year' follow-up) on return to work (RR 1.10, 95% CI 0.83 to 1.46; moderate-quality evidence), or on independence in ADL (RR 0.90, 95% CI 0.75 to 1.08; low-quality evidence). The study did not report effects on community integration or quality of life. None of the studies reported adverse effects of cognitive rehabilitation. Authors' conclusions There is insufficient good-quality evidence to support the role of cognitive rehabilitation when compared to no intervention or conventional rehabilitation in improving return to work, independence in ADL, community integration or quality of life in adults with TBI. There is moderate-quality evidence that cognitive rehabilitation provided as a home programme is similar to hospitalbased cognitive rehabilitation in improving return to work status among active duty military personnel with moderate-to-severe TBI. Moderate-quality evidence suggests that one cognitive rehabilitation strategy (cognitive didactic) is no better than another (functional experiential) in achieving return to work in veterans or military personnel with TBI. DOI: 10.1002/14651858.CD007935.pub2				
332.	Kumar, R., Bonfim, C. and George, B. Hematopoietic cell transplantation for aplastic anemia Curr Opin Hematol; 2017, 24 (6): 509-514 **Address:** aDepartment of Medical Oncology and Hematology, CancerCare Manitoba bDepartment of Internal Medicine, University of Manitoba, Winnipeg, Manitoba, Canada cBlood and Marrow Transplantation Unit, Department of Hematology, Hospital de Clinicas, Federal University of Parana, Curitiba, Brazil dDepartment of Haematology, **Christian Medical College, Vellore,** Tamil Nadu, India. PURPOSE OF REVIEW: Improvements in allogeneic hematopoietic cell transplantation (HCT) with better donor selection, conditioning regimens and graft vs. host disease prophylaxis make it reasonable to move HCT earlier in the algorithm for management of severe aplastic anemia (SAA). Recent progress in transplantation is reviewed whereas issues related to developing countries are also addressed. RECENT FINDINGS: Multiple research centers are reporting on clonality, mutations and telomere disorders in SAA, which may help to choose the most appropriate therapy upfront. Eltrombopag, in combination with immunosuppressive therapy (IST), has shown remarkable improvement over historical IST, and long-	**INT**	**JUL TO DEC**	**HAEMATOLOGY**	**PMID:**28877042 **Impact Factor:**3.200 **H-Index:** 85

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	term follow-up is awaited. In younger patients and in experienced centers, matched unrelated-donor (MUD) and related haploidentical transplants (haplo-HCT) are being reported with survival approaching that seen with sibling transplants. Literature from resource-limited countries highlight the need to modify guidelines to make them affordable and cost-effective. Bone marrow remains the graft source of choice; peripheral blood stem cells may be acceptable in special circumstances in resource-constrained countries. SUMMARY: The potential of novel research findings and new therapeutic trials should be maximized by validation in different centers, countries and patient populations to provide personalized care to patients with aplastic anemia.				
333.	Kumar, S. Roundup Indian J Urol; 2017, 33 (2): 101-103 **Address:** Department of Urology, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JAN TO JUN**	**UROLOGY**	**PMID:**28469295 **Impact Factor:**5.157 **H-Index:** 21
334.	Kumar, S., Christina, J., Jagadish, A. R., Peter, J. V., Thomas, K. and Sudarsanam, T. D. Caregiver perceptions on intensive care: A qualitative study from southern India Natl Med J India; 2017, 30 (3): 131-135 **Address:** Samarth, No. 100 Warren Road, Mylapore, Chennai 600004, Tamil Nadu, India. Clinical Epidemiology Unit, **Christian Medical College, Vellore,** Tamil Nadu, India. Medical Intensive Care Unit, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Medicine, Pondicherry Institute of Medical Sciences, Puducherry, India. Department of Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. BACKGROUND: Admission of a patient to an intensive care unit (ICU) can result in tremendous stress to family caregivers not only because of the need to provide physical and emotional support to the sick relative, but also due to the burden of decision-making on behalf of the critically ill person. We enquired about family caregivers' perspectives on intensive care, the challenges they faced with decision-	**NAT**	**JUL TO DEC**	**CLINICAL EPIDEMIOLOGY UNIT, MICU/ MEDICINE**	**PMID:**28936996 **Impact Factor:**1.412 **H-Index:** 35

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	making and their perceptions on the nature of their interactions with healthcare providers. METHODS: We used maximum variation sampling and enrolled 20 consenting caregivers for semi-structured interviews. Each interview, based on an interview guide, took 30-40 minutes and was conducted in a private place within the hospital premises. All interviews were recorded, transcribed verbatim and entered into a qualitative software (NVivo) for analysis. RESULTS: The three emergent themes of analysis were (i) understanding about ICU, (ii) decision-making concerning ongoing treatment; and (iii) relationship with healthcare-providers. Some respondents saw the intensive care as an expensive facility for seriously ill patients while others were not so clear. The family's relationship with the patient and their financial status were seen as important deciding factors in continuing treatment. Decision-making was a complex and emotional issue and doctors were held in awe and seen as the main deciding authority. The importance of doctors being compassionate and communicative was stressed. CONCLUSION: Our study highlights the problems faced by family caregivers and of the need to improve their satisfaction through clear and simple communication strategies.				
335.	Kumar, V., Yadav, A. K., Gang, S., John, O., Modi, G. K., Ojha, J. P., Pandey, R., Parameswaran, S., Prasad, N., Sahay, M., Varughese, S., Baid-Agarwal, S. and Jha, V. Indian chronic kidney disease study: Design and methods Nephrology (Carlton); 2017, 22 (4): 273-278 **Address:** Department of Nephrology, Post Graduate Institute of Medical Education and Research, Chandigarh, India. Muljibhai Patel Urological Hospital, Nadiad, India. George Institute for Global Health, New Delhi, India. Samarpan Kidney Institute and Research Center, Bhopal, India. Department of Nephrology, Institute of Medical Science, Banaras Hindu University, Varanasi, India. Department of Nephrology, Institute of Post Graduate Medical Education & Research, Kolkata, India. Department of Nephrology, Jawaharlal Institute of Postgraduate Medical Education & Research, Pondicherry, India. Department of Nephrology, Sanjay Gandhi Postgraduate Institute of Medical Science, Lucknow, India. Department of Nephrology, Osmania Medical College, Osmania General Hospital, Hyderabad, India. Department of Nephrology, **Christian Medical College, Vellore,** India. Department of Nephrology and Transplant Center, Sahlgrenska University Hospital, Gothenburg, Sweden. University of Oxford, Oxford, UK.	**INT**	**JAN TO JUN**	**NEPHROLOGY**	**PMID:**27062078 **Impact Factor:**1.563 **H-Index:** 48

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	AIM: The rate and factors that influence progression of chronic kidney disease (CKD) in developing countries like India are unknown. A pan-country prospective, observational cohort study is needed to address these knowledge gaps. **METHODS:** The Indian Chronic Kidney Disease (ICKD) study will be a cohort study of approximately 5000 patients with mild to moderate CKD presenting to centres that represent different geographical regions in India. Time to 50% decline in baseline estimated glomerular filtration rate, need of renal replacement therapy or any new cardiovascular disease (CVD) event or death from CVD are the primary end points. VALUE OF STUDY: This study will provide the opportunity to determine risk factors for CKD progression and development of CVD in Indian subjects and perform international comparisons to determine ethnic and geographical differences. A bio-repository will provide a chance to discover biomarkers and explore genetic risk factors.				
336.	Kumaran, S., George, G., Varsha, A. V. and Sahajanandan, R. Inverted left atrial appendage masquerading as a left atrial mass Ann Card Anaesth; 2017, 20 (2): 248-249 **Address:** Department of Anaesthesia, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. An inverted left atrial appendage after cardiac surgery is a rare finding and can be misinterpreted as a thrombus, mass, or vegetation. We report a case where intraoperative transesophageal echocardiography assisted in making an accurate diagnosis.	**INT**	**JAN TO JUN**	**ANAESTHESIA**	**PMID:**28393790 **Impact Factor:**1.340 **H-Index:** 18
337.	Kuriakose, C. K., Mishra, A. K., Vanjare, H. A., Raju, A. and Abraham, O. C. Visual Disturbance in Patients with Cryptococcal Meningitis: The Road Ahead J Neurosci Rural Pract; 2017, 8 (1): 151-152 **Address:** Department of General Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Radiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Ophthalmology, **Christian Medical College, Vellore,** Tamil Nadu, India.	**INT**	**JAN TO JUN**	**GENERAL MEDICINE, RADIOLOGY, OPHTHALMOLOGY**	**PMID:**28149110 **Impact Factor:**0.700 **H-Index:** 13

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
338.	Lahiri, A., Alex, A. G. and George, P. V. Estimating the prevalence of elevated plasma neutrophil gelatinase associated lipocalin (NGAL) level in patients with acute coronary syndromes (ACS), and its association with outcomes Indian Heart Journal; 2017, https://doi.org/10.1016/j.ihj.2017.06.005 **Address:** Department of Cardiology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India Objectives: The principal objective of this study was to estimate the plasma levels of neutrophil gelatinase associated lipocalin (NGAL) in a cohort of patients with acute coronary syndromes (ACS) across their entire spectrum, and to correlate them with outcomes. Methods: 87 patients with acute coronary syndromes were included in the study. Apart from the routine work up and management, all patients underwent determination of plasma NGAL and serum high sensitivity C reactive protein (HSCRP) levels at admission. The patients were followed up through the hospital stay as well as for one month after discharge for clinical outcomes, and echocardiographic parameters of left ventricular function. Plasma NGAL was studied for its predictive power for various defined outcomes. Results: Plasma NGAL levels were detectably elevated in 67% of patients with ACS without any significant proportion with renal dysfunction, sepsis or overt infection. Plasma NGAL was the strongest independent predictor of all cause hospital mortality in Cox regression multivariate analysis with an odds ratio of 8.353, p = 0.0237. Plasma NGAL did not correlate with HSCRP, or severity of coronary artery disease (CAD). Conclusion: This is a small study that shows that plasma NGAL in patients admitted with ACS can predict hospital mortality and forms the basis for consideration of this molecule as a possible new risk marker in ACS meriting further and more extensive investigation. © 2017 Cardiological Society of India.	**NAT**	**JUL TO DEC**	**CARDIOLOGY**	**NO PMID** **NO PMCID** **SCOPUS** **Impact Factor:**0.610 **H-Index:** 32
339.	Lahiri, A., Srinath, S. C., Chase, D. and Roshan, J. Zero fluoroscopy radiofrequency ablation for Typical Atrioventricular Nodal Reentrant Tachycardia (AVNRT) Indian Pacing Electrophysiol J; 2017, 17 (6): 180-182 **Address:** Department of Cardiac Electrophysiology and Pacing, **Christian Medical College and Hospital,** Ida Scudder Road, Vellore, Tamil Nadu, 632004, India. Electronic address: anandaroop_lahiri@yahoo.com. Department of Cardiac Electrophysiology and Pacing, **Christian Medical College and**	**NAT**	**JUL TO DEC**	**CARDIAC ELECTROPHYSIOLOGY AND PACING,**	**PMID:**29231822 **Impact Factor:**0.260 **H-Index:** 19

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Hospital, Ida Scudder Road, Vellore, Tamil Nadu, 632004, India. Electronic address: sirishchandrasrinath@gmail.com. Department of Cardiac Electrophysiology and Pacing, **Christian Medical College and Hospital,** Ida Scudder Road, Vellore, Tamil Nadu, 632004, India. Electronic address: davsuchi@cmcvellore.ac.in. Department of Cardiac Electrophysiology and Pacing, **Christian Medical College and Hospital,** Ida Scudder Road, Vellore, Tamil Nadu, 632004, India. Electronic address: johnroshanjacob@gmail.com.				
340.	Laishram, S., Pragasam, A. K., Bakthavatchalam, Y. D. and Veeraraghavan, B. An update on technical, interpretative and clinical relevance of antimicrobial synergy testing methodologies Indian J Med Microbiol; 2017, 35 (4): 445-468 Address: Department of Clinical Microbiology, **Christian Medical College, Vellore,** Tamil Nadu,, India. Testing for antimicrobial interactions has gained popularity in the last decade due to the increasing prevalence of drug-resistant organisms and limited options for the treatment of these infections. In vitro combination testing provides information, on which two or more antimicrobials can be combined for a good clinical outcome. Amongst the various in vitro methods of drug interactions, time-kill assay (TKA), checkerboard (CB) assay and E-test-based methods are most commonly used. Comparative performance of these methods reveals the TKA as the most promising method to detect synergistic combinations followed by CB assay and E-test. Various combinations of antimicrobials have been tested to demonstrate synergistic activity. Promising results were obtained for the combinations of meropenem plus colistin and rifampicin plus colistin against Acinetobacter baumannii, colistin plus carbapenem and carbapenem plus fluoroquinolones against Pseudomonas aeruginosa and colistin/polymyxin B plus rifampicin/meropenem against Klebsiella pneumoniae. Antagonism was detected in only few instances. The presence of synergy or antagonism with a combination seems to correlate with minimum inhibitory concentration of the agent and molecular mechanism involved in the resistance. Further studies need to be conducted to assess the utility of in vitro testing to predict clinical outcome and direct therapy for drug-resistant organisms.	**NAT**	**JAN TO JUNE**	**CLINICAL MICROBIOLOGY**	**PMID:29405135** **Impact Factor:** 1.149 **H-Index:**38
341.	Lalrinpuii, E., Bhageerathy, P. S., Sebastian, A., Jeyaseelan, L., Vinothathomas, Thomas, A., Chandy, R. and Peedicayil, A. Ovarian Cancer in Young Women Indian J Surg Oncol; 2017, 8 (4): 540-547 **Address:** Department of Gynaecologic Oncology, **Christian Medical College**	**NAT**	**JUL TO DEC**	**GYNAECOLOGIC ONCOLOGY, BIOSTATISTICS**	**PMID:**29203987 **PMCID:**5705514 **Impact Factor:**0.470 **H-Index:** 8

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Hospital, Vellore, Tamil Nadu 632004 India.0000 0004 1767 8969grid.11586.3b Department of Biostatistics, **Christian Medical College Hospital, Vellore,** 632004 India.0000 0004 1767 8969grid.11586.3b It is not clear how often epithelial tumours affect young women. This study aimed to evaluate the clinico-pathological pattern and survival outcome of women, 40 years and younger, with cancer ovary. Women 40 years and younger, operated between 2008 and 2012 for ovarian cancer, were retrospectively recruited and followed up. The study design was descriptive as well as a survival analysis. A hybrid of retrospective and prospective cohort design was used for risk factor analysis. Of the 115 women less than 40 years being operated for probable ovarian cancer, 22 were excluded for various reasons. Demographic details, clinical presentations, histopathological features, treatments and survival outcomes were studied. The primary outcomes looked for were death and recurrence. Secondary outcomes were complications of treatment and fertility. The predominant histology in the study population was epithelial tumour (70%), and serous adenocarcinoma was the commonest tumour type. The overall survival rate was 87%, and progression free survival was 63%. Time to death and recurrence were dependent on stage of disease, histology of tumour, primary treatment and residual disease at surgery. In multivariate analysis, the hazard ratio for recurrence in advanced stages was 12.6 (95% CI 3.5 to 45.5; $p < 0.001$) as compared to early stage disease. Epithelial ovarian cancers are common in young women. Death and recurrence are more likely in women with epithelial cancers, advanced stage disease and in those with residual tumour at cytoreductive surgery.				
342.	Lazarus, R. P., John, J., Shanmugasundaram, E., Rajan, A. K., Thiagarajan, S., Giri, S., Babji, S., Sarkar, R., Kaliappan, P. S., Venugopal, S., Praharaj, I., Raman, U., Paranjpe, M., Grassly, N. C., Parker, E. P. K., Parashar, U. D., Tate, J. E., Fleming, J. A., Steele, A. D., Muliyil, J., Abraham, A. M. and Kang, G. The effect of probiotics and zinc supplementation on the immune response to oral rotavirus vaccine: A randomized, factorial design, placebo-controlled study among Indian infants Vaccine; 2018, 36 (2): 273-279 **Address:** Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India. Department of Community Health, **Christian Medical College, Vellore,** India.	**INT**	**JUL TO DEC**	**GASTROINTESTINAL SCIENCES, COMMUNITY HEALTH, CLINICAL VIROLOGY**	**PMID:**28874323 **Impact Factor:**3.235 **H-Index:** 151

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Clinical Virology, **Christian Medical College, Vellore,** India. Department of Infectious Disease Epidemiology, Imperial College London, London, UK. Centers for Disease Control and Prevention, Atlanta, GA, USA. PATH, Seattle, WA, USA. Bill and Melinda Gates Foundation, Seattle, WA, USA. Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India. Electronic address: gkang@cmcvellore.ac.in. BACKGROUND: Strategies are needed to improve oral rotavirus vaccine (RV), which provides suboptimal protection in developing countries. Probiotics and zinc supplementation could improve RV immunogenicity by altering the intestinal microbiota and immune function. METHODS: Infants 5weeks old living in urban Vellore, India were enrolled in a randomized, double-blind, placebo-controlled trial with a 4-arm factorial design to assess the effects of daily zinc (5mg), probiotic (10(10)Lactobacillus rhamnosus GG) or placebo on the immunogenicity of two doses of RV (Rotarix(R), GlaxoSmithKline Biologicals) given at 6 and 10weeks of age. Infants were eligible for participation if healthy, available for the study duration and without prior receipt of RV or oral poliovirus vaccine other than the birth dose. The primary outcome was seroconversion to rotavirus at 14weeks of age based on detection of VP6-specific IgA at >/=20U/ml in previously seronegative infants or a fourfold rise in concentration. RESULTS: The study took place during July 2012 to February 2013. 620 infants were randomized equally between study arms and 551 (88.9%) completed per protocol. Seroconversion was recorded in 54/137 (39.4%), 42/136 (30.9%), 40/143 (28.0%), and 37/135 (27.4%) infants receiving (1) probiotic and zinc, (2) probiotic and placebo, (3) placebo and zinc, (4) two placebos. Seroconversion showed a modest improvement among infants receiving probiotic (difference between groups 1, 2 and 3, 4 was 7.5% (97.5% Confidence Interval (CI): -1.4%, 16.2%), p=0.066) but not zinc (difference between groups 1, 3 and 2, 4 was 4.4% (97.5% CI: -4.4%, 13.2%), p=0.272). 16 serious adverse events were recorded, none related to study interventions. CONCLUSIONS: Zinc or probiotic supplementation did not significantly improve the low immunogenicity of rotavirus vaccine given to infants in a poor urban community in India. A modest effect of combined supplementation deserves further investigation. TRIAL REGISTRATION: The trial was registered in India (CTRI/2012/05/002677).				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
343.	Leder, K., Borwein, S., Chanthavanich, P., Chatterjee, S., Htun, K., Marma, A. S. P., Nakatani, I., Ok, J. J., Pakasi, L., Pandey, P., Piyaphanee, W., Rupali, P., Schwartz, E., Shinozuka, T., Phu, P. T. H., Watanabe, H., Visser, J., Wilder-Smith, A., Zhang, M. and Mcguinness, S. L. Travel medicine perspectives of select travel medicine experts practicing in the Asia-Pacific region J Travel Med; 2017, 24 (4): **Address:** School of Public Health and Preventive Medicine, Monash University and Victorian Infectious Disease Service, Royal Melbourne Hospital at the Doherty Institute, Melbourne, Australia. TravelSafe Clinic, Hong Kong. Department of Tropical Paediatrics, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand. Travel and Tropical Medicine, Pulse Diagnostics, Kolkata, India. Directorate of Defence Medical Services, Myanmar. Deputy Civil Surgeon, Bandarban, Bangladesh. Travel Clinic, Nara Seibu Hospital, Nara, Japan. Travel Clinic, International Health Care Center, Seoul St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Seoul, Korea. AIC Clinic, Jakarta, Indonesia. CIWEC Hospital, Kathmandu, Nepal. Department of Clinical Tropical Medicine, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand. Department of Infectious Diseases, **Christian Medical College, Vellore,** India. Center for Geographic Medicine and Tropical Diseases, Chaim Sheba Medical Center, Tel Hashomer, and Sackler School of Medicine, Tel Aviv University, Tel Aviv, Israel. Japanese society of Travel Medicine and Srndagaya International Clinic, Tokyo, Japan. International SOS Vietnam, HCMC, Vietnam. Department of Infection Control and Prevention, Kurume University School of Medicine, Japan. University of Otago, Wellington, New Zealand. Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore. Guangdong International Healthcare Center, Guangzhou, China. School of Public Health and Preventive Medicine, Monash University and Department of Infectious Diseases, Alfred Hospital, Melbourne, Australia.	**INT**	**JUL TO DEC**	**INFECTIOUS DISEASES**	**PMID:**28426112 **Impact Factor:**1.803 **H-Index:** 48

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
344.	Lee, G. O., Mccormick, B. J. J., Seidman, J. C., Kosek, M. N., Haque, R., Olortegui, M. P., Lima, A. A. M., Bhutta, Z. A., Kang, G., Samie, A., Amour, C., Mason, C. J., Ahmed, T., Yori, P. P., Oliveira, D. B., Alam, D., Babji, S., Bessong, P., Mduma, E., Shrestha, S. K., Ambikapathi, R., Lang, D. R., Gottlieb, M., Guerrant, R. L., Caulfield, L. E. and For the Mal-Ed Network, Investigators Infant Nutritional Status, Feeding Practices, Enteropathogen Exposure, Socioeconomic Status, and Illness Are Associated with Gut Barrier Function As Assessed by the Lactulose Mannitol Test in the MAL-ED Birth Cohort Am J Trop Med Hyg; 2017, 97 (1): 281-290 **Address:** Department of Epidemiology, University of Michigan School of Public Health, Ann Arbor, Michigan. Fogarty International Center, National Institutes of Health, Bethesda, Maryland. Department of International Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland. icddr,b, Dhaka, Bangladesh. Asociacion Benefica PRISMA, Investigaciones Biomedicas, Iquitos, Peru. Institute of Biomedicine, Federal University of Ceara, Fortaleza, Brazil. Center of Excellence in Women and Child Health, the Aga Khan University, Karachi, Pakistan. Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India. Department of Microbiology, University of Venda, Thohoyandou, South Africa. Haydom Lutheran Hospital, Haydom, Tanzania. Walter Reed/Armed Forces Research Institute of Medical Sciences, Kathmandu, Nepal. Foundation for the NIH, Bethesda, Maryland. Division of Infectious Diseases, University of Virginia, Charlottesville, Virginia. The lactulose mannitol (LM) dual sugar permeability test is the most commonly used test of environmental enteropathy in developing countries. However, there is a large but conflicting literature on its association with enteric infection and host nutritional status. We conducted a longitudinal cohort using a single field protocol and comparable laboratory procedures to examine intestinal permeability in multiple, geographically diverse pediatric populations. Using a previously published systematic review to guide the selection of factors potentially associated with LM test results, we examined the relationships between these factors and mucosal	**INT**	**JUL TO DEC**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28719336 **PMCID:**5508897 **Impact Factor:**2.549 **H-Index:** 126

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	breach, represented by percent lactulose excretion; absorptive area, represented by percent mannitol excretion; and gut barrier function, represented by the L/M ratio. A total of 6,602 LM tests were conducted in 1,980 children at 3, 6, 9, and 15 months old; percent lactulose excretion, percent mannitol excretion, and the L/M ratio were expressed as age- and sex-specific normalized values using the Brazil cohort as the reference population. Among the factors considered, recent severe diarrhea, lower socioeconomic status, and recent asymptomatic enteropathogen infections were associated with decreased percent mannitol excretion and higher L/M ratios. Poorer concurrent weight-for-age, infection, and recent breastfeeding were associated with increased percent lactulose excretion and increased L/M ratios. Our results support previously reported associations between the L/M ratio and factors related to child nutritional status and enteropathogen exposure. These results were remarkably consistent across sites and support the hypothesis that the frequency of these exposures in communities living in poverty leads to alterations in gut barrier function.				
345.	Leung, M., Bassani, D. G., Racine-Poon, A., Goldenberg, A., Ali, S. A., Kang, G., Premkumar, P. S. and Roth, D. E. Conditional random slope: A new approach for estimating individual child growth velocity in epidemiological research American Journal of Human Biology; 2017, 29 (5): **Address:** Research Institute and Centre for Global Child Health, Peter Gilgan Centre for Research and Learning, The Hospital for Sick Children, Toronto, Canada. Dalla Lana School of Public Health, University of Toronto, Toronto, Canada. Department of Paediatrics, The Hospital for Sick Children and University of Toronto, Toronto, Canada. Novartis Pharma AG, Basel, Switzerland. Genetics and Genome Biology, Peter Gilgan Centre for Research and Learning, The Hospital for Sick Children, Toronto, Canada. Department of Pediatrics, The Aga Khan University, Karachi, Pakistan. Department of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India. Department of Biostatistics, **Christian Medical College, Vellore,** India. **OBJECTIVES:** Conditioning child growth measures on baseline accounts for regression to the mean (RTM). Here, we present the "conditional random slope"	**INT**	**JAN TO JUN**	**WELLCOME TRUST RESEARCH LABORATORY, BIOSTATISTICS**	**PMID:**28429467 **WOS:**000409912100011 **Impact Factor:**1.928 **H-Index:** 64

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	(CRS) model, based on a linear-mixed effects model that incorporates a baseline-time interaction term that can accommodate multiple data points for a child while also directly accounting for RTM. **METHODS:** In two birth cohorts, we applied five approaches to estimate child growth velocities from 0 to 12 months to assess the effect of increasing data density (number of measures per child) on the magnitude of RTM of unconditional estimates, and the correlation and concordance between the CRS and four alternative metrics. Further, we demonstrated the differential effect of the choice of velocity metric on the magnitude of the association between infant growth and stunting at 2 years. **RESULTS:** RTM was minimally attenuated by increasing data density for unconditional growth modeling approaches. CRS and classical conditional models gave nearly identical estimates with two measures per child. Compared to the CRS estimates, unconditional metrics had moderate correlation (r = 0.65-0.91), but poor agreement in the classification of infants with relatively slow growth (kappa = 0.38-0.78). Estimates of the velocity-stunting association were the same for CRS and classical conditional models but differed substantially between conditional versus unconditional metrics. **CONCLUSION:** The CRS can leverage the flexibility of linear mixed models while addressing RTM in longitudinal analyses.				
346.	Lewnard, J. A., Lopman, B. A., Parashar, U. D., Bar-Zeev, N., Samuel, P., Guerrero, M. L., Ruiz-Palacios, G. M., Kang, G. and Pitzer, V. E. Naturally Acquired Immunity Against Rotavirus Infection and Gastroenteritis in Children: Paired Reanalyses of Birth Cohort Studies J Infect Dis; 2017, 216 (3): 317-326 **Address:** Center for Communicable Disease Dynamics, Harvard T.H. Chan School of Public Health, Boston, Massachusetts. Department of Epidemiology of Microbial Diseases, Yale School of Public Health, New Haven, Connecticut. Department of Epidemiology, Rollins School of Public Health, Emory University. Division of Viral Diseases, Centers for Disease Control and Prevention, Atlanta, Georgia. Institute of Infection and Global Health, University of Liverpool, United Kingdom. Malawi-Liverpool-Wellcome Trust Clinical Research Programme, College of Medicine, University of Malawi, Blantyre. Department of Gastrointestinal Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. Instituto Nacional de Ciences Medicas y Nutricion Salvador Zubiran, Mexico City,	**INT**	**JUL TO DEC**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28859432 **Impact Factor:**6.273 **H-Index:** 220

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Mexico. Background: Observational studies in socioeconomically distinct populations have yielded conflicting conclusions about the strength of naturally acquired immunity against rotavirus gastroenteritis (RVGE), mirroring vaccine underperformance in low-income countries. We revisited birth cohort studies to understand naturally acquired protection against rotavirus infection and RVGE. Methods: We reanalyzed data from 200 Mexican and 373 Indian children followed from birth to 2 and 3 years of age, respectively. We reassessed protection against RVGE, decomposing the incidence rate into the rate of rotavirus infection and the risk of RVGE given infection, and tested for serum antibody correlates of protection using regression models. Results: Risk for primary, secondary, and subsequent infections to cause RVGE decreased per log-month of age by 28% (95% confidence interval [CI], 12%-41%), 69% (95% CI, 30%-86%), and 64% (95% CI, -186% to 95%), respectively, in Mexico City, and by 10% (95% CI, -1% to 19%), 51% (95% CI, 41%-59%) and 67% (95% CI, 57%-75%), respectively, in Vellore. Elevated serum immunoglobulin A and immunoglobulin G titers were associated with partial protection against rotavirus infection. Associations between older age and reduced risk for RVGE or moderate-to-severe RVGE given infection persisted after controlling for antibody levels. Conclusions: Dissimilar estimates of protection against RVGE may be due in part to age-related, antibody-independent risk for rotavirus infections to cause RVGE.				
347.	Liesner, R. J., Abashidze, M., Aleinikova, O., Altisent, C., Belletrutti, M. J., Borel-Derlon, A., Carcao, M., Chambost, H., Chan, A. K. C., Dubey, L., Ducore, J., Fouzia, N. A., Gattens, M., Gruel, Y., Guillet, B., Kavardakova, N., El Khorassani, M., Klukowska, A., Lambert, T., Lohade, S., Sigaud, M., Turea, V., Wu, J. K. M., Vdovin, V., Pavlova, A., Jansen, M., Belyanskaya, L., Walter, O., Knaub, S. and Neufeld, E. J. Immunogenicity, efficacy and safety of Nuwiq((R)) (human-cl rhFVIII) in previously untreated patients with severe haemophilia A-Interim results from the NuProtect Study Haemophilia. 2017 Aug 16. doi: 10.1111/hae.13320. [Epub ahead of print] **Address:** Great Ormond Hospital for Children NHS Trust Haemophilia Centre, London, UK.	**INT**	**JUL TO DEC**	**GAEMATOLOGY**	**PMID:**28815880 **Impact Factor:**3.569 **H-Index:** 79

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	JSC Institute of Haematology and Transfusiology, Tbilisi, Georgia. Republican Scientific and Practical Centre of Children Oncology, Hematology and Immunology, Minsk, Belarus. Unitat d'Hemofilia, Hospital Vall D'Hebron, Barcelona, Spain. Pediatric Hematology, Department of Pediatrics, University of Alberta, Edmonton, AB, Canada. Hopital de la Cote de Nacre, Caen, France. Hospital for Sick Children, Toronto, ON, Canada. Department of Pediatric Hematology Oncology, Children Hospital La Timone, APHM and Inserm, UMR 1062, Aix Marseille University, Marseille, France. Division of Pediatric Hematology/Oncology, McMaster University, Hamilton, ON, Canada. Western Ukrainian Specialized Children's Medical Centre, Lviv, Ukraine. Department of Pediatrics, UC Davis Medical Center, Sacramento, CA, USA. **Christian Medical College vellore**, Vellore, India. Cambridge University Hospital NHS Foundation Trust, Cambridge, UK. Hopital Trousseau, Centre Regional de Traitement de l'Hemophilie, Tours, France. Haemophilia Treatment Centre of Rennes-Brittany, University Hospital of Rennes, Rennes, France. National Children's Specialized Clinic "OHMATDET", Kiev, Ukraine. Centre de traitement de l'hemophilie, University Mohamed V, Rabat, Morocco. Warsaw Medical University, Warsaw, Poland. CRTH Hopital Universitaire Bicetre APHP, Le Kremlin Bicetre, France. Sahyadri Speciality Hospital, Pune, India. Centre Regional de Traitement de I'Hemophilie, University Hospital of Nantes, Nantes, France. Scientific Research Institute of Mother and Child Health Care, Chisinau, Moldova. B.C. Children's Hospital, Vancouver, BC, Canada. Morozovskaya Children's Hospital, Moscow, Russia. Institute of Experimental Haematology and Transfusion Medicine, University Clinic Bonn, Bonn, Germany. Octapharma Pharmazeutika Produktionsges.mbH, Vienna, Austria. Octapharma AG, Lachen, Switzerland. St. Jude Children's Research Hospital, Memphis, TN, USA. INTRODUCTION: Nuwiq((R)) (Human-cl rhFVIII) is a fourth generation recombinant FVIII, produced in a human cell line, without chemical modification or				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	protein fusion. No inhibitors developed in studies with Nuwiq((R)) in 201 previously treated patients with haemophilia A (HA). The immunogenicity, efficacy and safety of Nuwiq((R)) in previously untreated patients (PUPs) with severe HA are being assessed in the ongoing NuProtect study. METHODS: The study, conducted across 38 centres worldwide, is evaluating 110 true PUPs of all ages and ethnicities enrolled for study up to 100 exposure days (EDs) or 5 years maximum. The primary objective is to assess the immunogenicity of Nuwiq((R)) (inhibitor activity >/=0.6 BU) using the Nijmegen-modified Bethesda assay at a central laboratory. RESULTS: Data for 66 PUPs with >/=20 EDs from a preplanned interim analysis were analysed. High-titre (HT) inhibitors developed in 8 of 66 patients after a median of 11.5 EDs (range 6-24). Five patients developed low-titre inhibitors (4 transient). The cumulative incidence (95% confidence interval) was 12.8% (4.5%, 21.2%) for HT inhibitors and 20.8% (10.7%, 31.0%) for all inhibitors. During inhibitor-free periods, median annualized bleeding rates during prophylaxis were 0 for spontaneous bleeds and 2.40 for all bleeds. Efficacy was rated as "excellent" or "good" in treating 91.8% of bleeds. Efficacy of surgical prophylaxis was "excellent" or "good" for 8 (89%) procedures and "moderate" for 1 (11%). No tolerability concerns were evident. CONCLUSION: These interim data show a cumulative incidence of 12.8% for HT inhibitors and convincing efficacy and tolerability in PUPs treated with Nuwiq((R)) .				
348.	**Lillian Lim**[1], Jyoti Panwar[2], Jennifer Stimec[3], Shirley M.L. Tse[4], Brian M. Feldman[5] and Ronald M. Laxer[6], a Retrospective Study of Clinical Factors Influencing the Development of Overlapping Disease Features in Pediatric Patients with Chronic Recurrent Multifocal Osteomyelitis (CRMO) and Spondyloarthropathies (SpA) [abstract]. Arthritis Rheumatol. 2017; 69 (suppl 10). [**ABSTRACT NUMBER: 373]** http://acrabstracts.org/abstract/a-retrospective-study-of-clinical-factors-influencing-the-development-of-overlapping-disease-features-in-pediatric-patients-with-chronic-recurrent-multifocal-osteomyelitis-crmo-and-spondyloarthropat/. **Author Information:** [1]Paediatrics, The Hospital for Sick Children, Toronto, ON, Canada, [2]**Christian Medical College, Vellore,** India, Vellore, India, [3]The Hospital for Sick Children, Toronto, ON, Canada, [4]Rheumatology, The Hospital for Sick Children, University of Toronto, Toronto, ON, Canada, [5]Rheumatology, The Hospital for Sick Children, Toronto, ON, Canada, [6]Div of Rheumatology, The Hospital for Sick Children, Toronto, ON, Canada	**INT**	**JUL TO DEC**	**RHEUMATOLOGY**	**WOS:**000411824100372 **Impact Factor:**6.918 **H-Index:** 271

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Accessed January 11, 2018.				
349.	Lima, A. A. M., Soares, A. M., Filho, J. Q. S., Havt, A., Lima, I. F. N., Lima, N. L., Abreu, C. B., Junior, F. S., Mota, R. M. S., Pan, W. K., Troeger, C., Medeiros, Phqs, Vera, H. N., Prata, M. M. G., Mccormick, B., Mcgrath, M., Rogawski, E., Houpt, E., Platts-Mills, J., Gratz, J., Samie, A., Bessong, P., Babji, S., Kang, G., Shahida, Q., Shakoor, S., Bhutta, Z., Haque, R., Ahmed, T., Mduma, E., Svensen, E., Kosek, M., Penataro Yori, P., Bodhidatta, L., Jasmin, S., Mason, C., Lang, D., Gottlieb, M. and Guerrant, R. L. Enteroaggregative E. coli Subclinical Infection and co-Infections and Impaired Child Growth in the MAL-ED Cohort Study J Pediatr Gastroenterol Nutr. 2017 Sep 12. doi: 10.1097/MPG.0000000000001717. [Epub ahead of print] **Address:** *Universidade Federal do Ceara, Clinical Research Unit and Institute of Biomedicine daggerDuke Global Health Institute, Duke University, Durham, NC double daggerInstitute for Health Metrics and Evaluation, Seattle, Wash section signNational Institutes of Health, Fogarty International Center ||University of Virginia, Division of Infectious Diseases and International Health paragraph signUniversity of Venda, Microbiology #**Christian Medical College and Hospital** Vellore, Division of Gastrointestinal Sciences ****Christian Medical College,** Gastrointestinal Sciences daggerdaggerAga Khan University double daggerdouble daggerAga Khan University, Pediatrics section sign section signInternational Centre for Diarrhoeal Disease Research ||||Haydom Lutheran Hospital paragraph sign paragraph signHaukeland University Hospital ##Johns Hopkins University ***Walter Reed AFRIMS Research Unit Nepal daggerdaggerdaggerArmed Forces Research Institute of Medical Sciences double daggerdouble daggerdouble daggerFoundation for the National Institutes of Health. OBJECTIVE: We evaluated the impact of subclinical enteroaggregative Escherichia coli (EAEC) infection alone and in combination with other pathogens in the first six months of life on child growth. METHODS: Non-diarrheal samples from 1,684 children across eight Multisite Birth Cohort Study, Malnutrition and Enteric Diseases (MAL-ED) sites in Asia, Africa, and Latin America were tested monthly; over 90% of children were followed-up twice weekly for the first six months of life. RESULTS:	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY, WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28906319 **Impact Factor:**2.799 **H-Index:** 108

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Children with subclinical EAEC infection did not show altered growth between enrollment and six months. Conversely, EAEC co-infection with any other pathogen was negatively associated with delta weight-for-length (WLZ) ($p < 0.05$) and weight-for-age (WAZ) ($p > 0.05$) z-scores between 0 and 6 months. The presence of two or more pathogens without EAEC was not significantly associated with delta WLZ and WAZ. The most frequent EAEC co-infections included Campylobacter spp. heat-labile toxin-producing enterotoxigenic E. coli, Cryptosporidium spp., and atypical enteropathogenic E. coli. Myeloperoxidase levels were increased with EAEC co-infection ($p < 0.05$). EAEC pathogen co-detection was associated with lower neopterin levels compared to those of no-pathogen control children ($p < 0.05$). Mothers of children with EAEC co-infections had lower levels of education, poorer hygiene and sanitation, lower socioeconomic status, and lower breastfeeding rates compared to mothers of children in whom no pathogen was detected ($p < 0.05$). CONCLUSIONS: These data emphasize the public health importance of subclinical EAEC infection in early infancy in association with other pathogens and the need for improved maternal and child care, hygiene, sanitation, and socioeconomic factors.				
350.	Lindley, Richard I., Anderson, Craig S., Billot, Laurent, Forster, Anne, Hackett, Maree L., Harvey, Lisa A., Jan, Stephen, Li, Qiang, Liu, Hueiming, Langhorne, Peter, Maulik, Pallab K., Murthy, Gudlavalleti Venkata Satyanarayana, Walker, Marion F., Pandian, Jeyaraj D., Alim, M., Felix, C., Gandhi, D. B. C., Syrigapu, A., Tugnawat, D. K., Verma, S. J., Shamanna, B. R., Hankey, G., Thrift, A., Bernhardt, J., Mehndiratta, M. M., Jeyaseelan, L., Donnelly, P., Byrne, D., Steley, S., Santhosh, V., Chilappagari, S., Mysore, J., Roy, J., Padma, M. V., John, L., Aaron, S., Borah, N. C., Vijaya, P., Kaul, S., Khurana, D., Sylaja, P. N., Halprashanth, D. S., Madhusudhan, B. K., Nambiar, V., Sureshbabu, S., Khanna, M. C., Narang, G. S., Chakraborty, D., Chakraborty, S. S., Biswas, B., Kaura, S., Koundal, H., Singh, P., Andrias, A., Thambu, D. S., Ramya, I., George, J., Prabhakar, A. T., Kirubakaran, P., Anbalagan, P., Ghose, M., Bordoloi, K., Gohain, P., Reddy, N. M., Reddy, K. V., Rao, T. N. M., Alladi, S., Jalapu, V. R. R., Manchireddy, K., Rajan, A., Mehta, S., Katoch, C., Das, B., Jangir, A., Kaur, T., Sreedharan, S., Sivasambath, S., Dinesh, S., Shibi, B. S., Thangaraj, A., Karunanithi, A., Sulaiman, S. M. S., Dehingia, K., Das, K., Nandini, C., Thomas, N. J., Dhanya, T. S., Thomas, N., Krishna, R., Aneesh, V., Khullar, S., Thouman, S., Sebastian, I. and Grp, Attend Collaborative Family-led rehabilitation after stroke in India (ATTEND): a randomised controlled	**INT**	**JUL TO DEC**	**MEDICINE UNIT II**	**PMID:**28666682 **WOS:**000406855800023 **Impact Factor:**47.831 **H-Index:** 646

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	trial Lancet. 2017 Aug 5;390(10094):588-599. doi: 10.1016/S0140-6736(17)31447-2. Epub 2017 Jun 27. Background Most people with stroke in India have no access to organised rehabilitation services. The effectiveness of training family members to provide stroke rehabilitation is uncertain. Our primary objective was to determine whether family-led stroke rehabilitation, initiated in hospital and continued at home, would be superior to usual care in a low-resource setting. Methods The Family-led Rehabilitation after Stroke in India (ATTEND) trial was a prospectively randomised open trial with blinded end point done across 14 hospitals in India. Patients aged 18 years or older who had had a stroke within the past month, had residual disability and reasonable expectation of survival, and who had an informal family nominated caregiver were randomly assigned to intervention or usual care by site coordinators using a secure web based system with minimisation by site and stroke severity. The family members of participants in the intervention group received additional structured rehabilitation training-including information provision, joint goal setting, carer training, and task-specific training-that was started in hospital and continued at home for up to 2 months. The primary outcome was death or dependency at 6 months, defined by scores 3-6 on the modified Rankin scale (range, 0 [no symptoms] to 6 [death]) as assessed by masked observers. Analyses were by intention to treat. This trial is registered with Clinical Trials Registry-India (CTRI/2013/04/003557), Australian New Zealand Clinical Trials Registry (ACTRN12613000078752), and Universal Trial Number (U1111-1138-6707). Findings Between Jan 13, 2014, and Feb 12, 2016, 1250 patients were randomly assigned to intervention (n=623) or control (n=627) groups. 33 patients were lost to follow-up (14 intervention, 19 control) and five patients withdrew (two intervention, three control). At 6 months, 285 (47%) of 607 patients in the intervention group and 287 (47%) of 605 controls were dead or dependent (odds ratio 0.98, 95% CI 0.78-1.23, p=0.87). 72 (12%) patients in the intervention group and 86 (14%) in the control group died (p=0.27), and we observed no difference in rehospitalisation (89 [14%] patients in the intervention group vs 82 [13%] in the control group; p=0.56). We also found no difference in total nonfatal events (112 events in 82 [13%] intervention patients vs 110 events in 79 [13%] control patients; p=0.80). Interpretation Although task shifting is an attractive				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	solution for health-care sustainability, our results do not support investment in new stroke rehabilitation services that shift tasks to family caregivers, unless new evidence emerges. A future avenue of research should be to investigate the effects of task shifting to health-care assistants or team-based community care.				
351.	Long, K. N. G., Paterson, G. and Bhattacharji, S. Whole-person health and development: two South Indian initiatives Development in Practice; 2017, 27 (5): 760-765 **Address:** Boston University, School of Public Health, United States Heythrop College, University of London, United Kingdom **CMC Vellore,** India In responding to the 2016 reformulation of the United Nation's Sustainable Development Goals, the development community's efforts are focused on a sweep of initiatives aiming to promote whole-society, sustainable development. The ambition of the SDGs is inspiring, but also daunting, and does not always sit easily within national models of economic development. This viewpoint profiles two organisations in the south Indian state of Tamil Nadu, that have decades of experience in whole-person development among scheduled tribes and disability communities. Both organisations serve as timely examples of ongoing holistic, whole-person health and development in the context of new ideals and economic realities. © 2017 Informa UK Limited, trading as Taylor & Francis Group.	**INT**	**JUL TO DEC**	**FAMILY MEDICINE, LCECU**	**NO PMID** **NO PMCID** **SCOPUS** **Impact Factor:**0.410 **H-Index:** 32
352.	Mace, M., Guy, S., Hussain, A., Diane Playford, E., Ward, N., Balasubramanian, S. and Burdet, E. Validity of a sensor-based table-top platform to measure upper limb function IEEE Int Conf Rehabil Robot; 2017, 2017 652-657 **Address:**Michael Mace; Department of Bioengineering, Imperial College London, SW7 2AZ UK, Sarah Guy; Department of Bioengineering, Imperial College London, SW7 2AZ UK, Asif Hussain; School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore, Edith Diane Playford; National Hospital for Neurology and Neurosurgery, Queens square, UK, Nick Ward; National Hospital for Neurology and Neurosurgery, Queens square, UK, Sivakumar Balasubramanian; Department of Bioengineering, **Christian Medical College, Vellore India,** Etienne Burdet; Department of Bioengineering, Imperial College	**INT**	**JUL TO DEC**	**BIOENGINEERING**	**PMID:**28813894 **Indexed in PubMed**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	London, SW7 2AZ UK Objective measurement is an essential part of the assessment process in neurological dysfunction such as stroke. However, current clinical scores are insensitive and based on subjective observation from experts. Technology provides an opportunity for enhanced accuracy and specificity of objective measurement. This study describes the use of an interactive force-sensitive table-top platform for the assessment of reach in post-stroke patients, admitted as part of a three week intensive upper limb training programme. Objective measures from the reachable workspace were extracted and included normalised reach distance, normalised reached speed and reach dragging. The data was compared to standardised Fugl-Meyer (FM) clinical scores, recorded at admission (FMPRE) and discharge (FMPOST). Results indicate strong relationships between the three objective measures and subjective FM scores, with significant Spearman correlations found in all cases ($\|rho\| > 0.5$, $p < 0.05$). The results highlight the validity for a sensor-based table-top system to provide a simple, flexible, and objective platform for assessment of impaired upper limb motor function.				
353.	Mahima Mittal, Jeromie Wesley Vivian Thangaraj, Winsley Rose, Valsan Philip Verghese, C.P. Girish Kumar, Mahim Mittal, R. Sabarinathan, Vijay Bondre, Nivedita Gupta, and Manoj V. Murhekar Scrub Typhus as a Cause of Acute Encephalitis Syndrome, Gorakhpur, Uttar Pradesh, India Emerging Infectious Diseases; 2017, 23 (8): 1414-1416 **Author affiliations:** BRD Medical College, Gorakhpur, India (Mahima Mittal, Mahim Mittal); National Institute of Epidemiology, Chennai, India (J.W.V. Thangaraj, C.P. Girish Kumar, R. Sabarinathan, M.V. Murhekar); **Christian Medical College, Vellore,** India (W. Rose, V.P. Verghese); National Institute of Virology, Gorakhpur (V. Bondre); Indian Council of Medical Research, Delhi, India (N. Gupta) Outbreaks of acute encephalitis syndrome (AES) have been occurring in Gorakhpur Division, Uttar Pradesh, India, for several years. In 2016, we conducted a case-control study. Our findings revealed a high proportion of AES cases with Orientia tsutsugamushi IgM and IgG, indicating that scrub typhus is a cause of AES.DOI: 10.3201/eid2308.170025	**INT**	**JUL TO DEC**	**CHILD HEALTH, INFECTIOUS DISEASE**	**PMID:**28726617 **PMCID:PMC**5547812 **WOS:**000405673200032 **Impact Factor:**8.222 **H-Index:** 189

INT – INTERNATIONAL; NAT – NATIONAL; PMID: PUBMED ID; PMCID: PUBMED CENTRAL ID; WOS – WEB OF SCIENCE ID

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
354.	Maiwall, R., Sarin, S. K., Kumar, S., Jain, P., Kumar, G., Bhadoria, A. S., Moreau, R., Kedarisetty, C. K., Abbas, Z., Amarapurkar, D., Bhardwaj, A., Bihari, C., Butt, A. S., Chan, A., Chawla, Y. K., Chowdhury, A., Dhiman, R., Dokmeci, A. K., Ghazinyan, H., Hamid, S. S., Kim, D. J., Komolmit, P., Lau, G. K., Lee, G. H., Lesmana, L. A., Jamwal, K., Mamun Al, Mahtab, Mathur, R. P., Nayak, S. L., Ning, Q., Pamecha, V., Alcantara-Payawal, D., Rastogi, A., Rahman, S., Rela, M., Saraswat, V. A., Shah, S., Shiha, G., Sharma, B. C., Sharma, M. K., Sharma, K., Tan, S. S., Chandel, S. S., Vashishtha, C., Wani, Z. A., Yuen, M. F., Yokosuka, O., Duseja, A., Jafri, W., Devarbhavi, H., Eapen, C. E., Goel, A., Sood, A., Ji, J., Duan, Z. and Chen, Y. Development of predisposition, injury, response, organ failure model for predicting acute kidney injury in acute on chronic liver failure Liver Int; 2017, 37 (10): 1497-1507 **Address:** Department of Hepatology, Institute of Liver and Biliary Sciences, New Delhi, India. Department of Clinical Hematology, Command Hospital [Eastern Command], Kolkata, India. Department of Clinical Research, Institute of Liver and Biliary Sciences, New Delhi, India. UMR_S1149, Center for Research in Inflammation (CRI), Inserm and Paris Diderot University, Paris, France. DHU Unity, Liver unit, Beaujon hospital, APHP, Clichy, France. Department of Gastroenterology, Ziauddin University Hospital, Karachi, Pakistan. Department of Gastroenterology and Hepatology, Bombay Hospital and Medical Research, Mumbai, India. Department of Pathology, Institute of Liver and Biliary Sciences, New Delhi, India. Department of Medicine, Aga Khan University Hospital, Karachi, Pakistan. Department of Surgery, Division of Hepatobiliary and Pancreatic surgery, and Liver Transplantation, The University of Hong Kong, Hong Kong, China. Department of Hepatology, Post Graduate Institute of Medical Education and Research, Chandigarh, India. Department of Gastroenterology, Ankara University School of Medicine, Ankara, Turkey. Department of Hepatology, Nork Clinical Hospital of Infectious Diseases, Yerevan, Armenia. Center for Liver and Digestive Diseases, Hallym University Chuncheon Sacred	**INT**	**JUL TO DEC**	**GASTROENTEROLOGY AND HEPATOLOGY**	**PMID:**28393476 **Impact Factor:**4.116 **H-Index:** 90

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Heart Hospital, Gangwon-Do, Korea. Department of Medicine, Division of Gastroenterology and Hepatology, Chulalongkorn University, Bangkok, Thailand. Department of Hepatology, The Institute of Translational Hepatology, Beijing 302 Hospital, Beijing, China. Department of Medicine, National University Health System, Singapore, Singapore. Division of Hepatology, University of Indonesia, Jakarta, Indonesia. Department of Hepatology, Bangabandhu Sheikh Mujib Medical University, Dhaka, Bangladesh. Department of Nephrology, Institute of Liver and Biliary Sciences, New Delhi, India. Department of Infectious Disease, Tongji Hospital of Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China. Department of Hepatobiliary Surgery, Institute of Liver and Biliary Sciences, New Delhi, India. Department of Hepatology, Cardinal Santos Medical Center, Manila, Philippines. Institute of Liver diseases and Transplantation, Global Health city, Chennai, India. Department of Gastroenterology, Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, India. Department of Hepatology, Global Hospitals, Mumbai, India. Department of Internal Medicine, Egyptian Liver Research Institute and Hospital, Cairo, Egypt. Department of Gastroenterology, GB Pant Hospital, New Delhi, India. Department of Hepatology Selayang Hospital, Selangor, Malaysia. Department of Medicine, The University of Hong Kong, Hong Kong, China. Department of Gastroenterology and Nephrology, Graduate School of Medicine, Chiba University, Chiba, Japan. Department of Gastroenterology, St.John's Medical College and Hospital, Bangalore, India. Department of Gastroenterology and Hepatology, **CMC, Vellore, India**. Department of Gastroenterology, Rome, NY, USA. Department of Gastroenterology, Dayanand Medical College and Hospital, Ludhiana, India. Department of Gastroenterology, Liver Research Center, Beijing, China. Department of Gastroenterology, Nanjing First Hospital, Nanjing, China. Department of Gastroenterology, East Brunswick, NJ, USA.				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	BACKGROUND AND AIM: There is limited data on predictors of acute kidney injury in acute on chronic liver failure. We developed a PIRO model (Predisposition, Injury, Response, Organ failure) for predicting acute kidney injury in a multicentric cohort of acute on chronic liver failure patients. PATIENTS AND METHODS: Data of 2360 patients from APASL-ACLF Research Consortium (AARC) was analysed. Multivariate logistic regression model (PIRO score) was developed from a derivation cohort (n=1363) which was validated in another prospective multicentric cohort of acute on chronic liver failure patients (n=997). RESULTS: Factors significant for P component were serum creatinine[(>/=2 mg/dL)OR 4.52, 95% CI (3.67-5.30)], bilirubin [(<12 mg/dL,OR 1) vs (12-30 mg/dL,OR 1.45, 95% 1.1-2.63) vs (>/=30 mg/dL,OR 2.6, 95% CI 1.3-5.2)], serum potassium [(<3 mmol/LOR-1) vs (3-4.9 mmol/L,OR 2.7, 95% CI 1.05-1.97) vs (>/=5 mmol/L,OR 4.34, 95% CI 1.67-11.3)] and blood urea (OR 3.73, 95% CI 2.5-5.5); for I component nephrotoxic medications (OR-9.86, 95% CI 3.2-30.8); for R component,Systemic Inflammatory Response Syndrome,(OR-2.14, 95% CI 1.4-3.3); for O component, Circulatory failure (OR-3.5, 95% CI 2.2-5.5). The PIRO score predicted acute kidney injury with C-index of 0.95 and 0.96 in the derivation and validation cohort. The increasing PIRO score was also associated with mortality (P<.001) in both the derivation and validation cohorts. CONCLUSIONS: The PIRO model identifies and stratifies acute on chronic liver failure patients at risk of developing acute kidney injury. It reliably predicts mortality in these patients, underscoring the prognostic significance of acute kidney injury in patients with acute on chronic liver failure.				
355.	Maiwall, Rakhi, Choudhury, Ashok K., Sharma, Barjesh C., Kumar, Manoj, Devarbhavi, Harshad, Mahtab, Mamun A., Duan, Zhongping, Chen, Yu, Ning, Qin, Ma, Ke, Jia, Jidong, **Eapen, C. E.,** Goel, Ashish, Chawla, Yogesh K., Taneja, Sunil, Tan, Soek Siam, Kim, Dong Joon, Ghazinyan, Hasmik, Hu, Jinhua, Lee, Guan Huei, Treeprasertsuk, Sombat, Lesmana, Laurentius A., Hamid, Saeed S., Butt, Amna S., Jafri, Syed M., Amarapurkar, Deepak N., Shukla, Akash, Shah, Samir R., Abbas, Zaigham, Sollano, Jose D., Carpio, Gian, Sahu, Manoj K., Lau, George, Rao, Padaki Nagaraja, Karim, Mohammad Fazal, Payawal, Diana A., Saraswat, Vivek A., Prasad, Mohan, Yuen, Man Fung, Rahman, Salimur, Dokmeci, Abdulkadir, Jamwal, Kapil D., Anand, Lovkesh, Kumar, Guresh, Jain, Priyanka, Bhardwaj, Ankit, Paulson, Irene, Sarin, Shiv K. and Party, Apasl Aclf Working	**INT**	**JUL TO DEC**	**GASTROENTEROLOGY AND HEPATOLOGY**	**NO PMID** **WOS:**000412089800525 **Impact Factor:**13.246 **H-Index:** 306

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Dynamic AARC-AKI score determines Extrarenal Organ Failures and Bacterial Infection in patients with Acute on Chronic Liver Failure Hepatology; 2017, 66 288A-288A				
356.	Maji, Suvendu, Paul, M. J. and Sen, Supriya Dermatofibrosarcoma Protuberans of the Breast—a Rare Entity Indian Journal of Surgical Oncology; 2017, **Address: Christian Medical College and Hospital** Vellore, Vellore, Tamil Nadu, India. Dermatofibrosarcoma protuberans (DFSP) represents about 1% of soft-tissue sarcomas with an estimated incidence of 0.8 to 5.0 cases per million per year. This lesion may occur anywhere in the body but more than 50% occur on the trunk, 20% on the head and neck and 30% on the extremities. DFSP of the breast is an extremely uncommon site of presentation. Data regarding DFSP of the breast is limited and mostly in the form of case reports. Clinical presentation is not uniform and may mimic benign skin lesions [1]. However, it typically presents as a nodular cutaneous mass in early or mid-adult life. We herein report a case of DFSP of the breast in a 33-year-old lady who was managed successfully in our institute and review the literature associated with it.	**NAT**	**JUL TO DEC**	**ENDOCRINE SURGERY**	**Indexed in PubMed**
357.	Mammen, S., Keshava, S. N., Moses, V., Aaron, S., Ahmed, M., Chiramel, G. K., Mani, S. E. and Alexander, M. Role of penumbra mechanical thrombectomy device in acute dural sinus thrombosis Indian J Radiol Imaging; 2017, 27 (1): 82-87 **Address:** Department of Radiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Neurology, **Christian Medical College, Vellore,** Tamil Nadu, India. **BACKGROUND:** In dural venous sinus thrombosis (DVST), the mortality ranges 5-30%. Deep venous system involvement and septic dural sinus thrombosis have a higher mortality rate. In acute occlusion, collateral flow may not be established,	**NAT**	**JAN TO JUN**	**RADIOLOGY, NEUROLOGY**	**PMID:**28515593 **Impact Factor:** NA **H-Index:** 15

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	which may result in significant edema and mass effect. Endovascular interventions may be considered as a treatment option in appropriate high-risk patients with DVST. **MATERIALS AND METHODS:** Eight patients with magnetic resonance imaging (MRI)-confirmed dural sinus thrombosis, who did not respond to the conventional standard medical treatment, were subsequently treated with mechanical thrombectomy using the Penumbra System(R). In all cases, medical treatment including anticoagulants were continued following the procedure for a minimum period of 1 year. **RESULTS:** Recanalization of the dural sinus thrombosis was achieved in all 8 cases. There were no immediate or late endovascular-related complications. One death occurred due to an unrelated medical event. At 6 months, there was notable improvement in the modified Rankin Score (mRS), with 5/8 (62%) patients achieving mRS of 2 or less. The follow-up ranged between 3 months and 26 months (mean: 14.5 months), and there were no new neurological events during the follow-up period. **CONCLUSION:** Cerebral venous sinus thrombosis is a rare but life-threatening condition that demands timely diagnosis and therapy. In cases of rapidly declining neurological status despite standard therapy with systemic anticoagulation and anti-edema measures, mechanical thrombectomy could be a lifesaving and effective option. In this study, good outcomes were observed in the majority of patients at long-term follow up.				
358.	Manesh, A., Balaji, V., Kumar, D. R. and Rupali, P. A case of clinical and microbiological failure of azithromycin therapy in Salmonella enterica serotype Typhi despite low azithromycin MIC Int J Infect Dis; 2017, 54 62-63 **Address:** Department of Infectious Diseases, **Christian Medical College, Vellore,** India. Electronic **Address:** abimanesh@gmail.com Department of Clinical Microbiology, **Christian Medical College, Vellore,** India. Electronic **Address:** vbalaji@cmcvellore.ac.in Department of Clinical Microbiology, **Christian Medical College, Vellore,** India. Electronic **Address:** speed.naveen1@gmail.com Department of Infectious Diseases, **Christian Medical College, Vellore,** India. Electronic **Address:** prisci@cmcvellore.ac.in Typhoid fever remains a serious problem in many developing countries. Due to resistance to multiple first line drugs, azithromycin has evolved as an important drug in the treatment of typhoid. While therapy with azithromycin is highly	**INT**	**JAN TO JUN**	**INFECTIOUS DISEASES, CLINICAL MICROBIOLOGY**	**PMID:**27894983 **Impact Factor:**2.532 **H-Index:** 65

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	effective, no clinically validated mean inhibitory concentration (MIC) break points or disc diffusion cutoff guidelines are available so far. We describe an Indian adult with clinical and microbiological failure to azithromycin despite low azithromycin MIC.				
359.	Manesh, A., Mani, R. S., Pichamuthu, K., Jagannati, M., Mathew, V., Karthik, R., Abraham, O. C., Chacko, G. and Varghese, G. M. Case Report: Failure of Therapeutic Coma in Rabies Encephalitis Am J Trop Med Hyg; 2017, **Address:** Department of Infectious Diseases, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Neurovirology, WHO Collaborating Centre for Reference and Research on Rabies, National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore, Karnataka, India. Division of Critical Care, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Neurological Sciences, Neurology Unit, **Christian Medical College, Vellore,** Tamil Nadu, India. Section of Neuropathology, Department of Neurological Sciences & Pathology, **Christian Medical College and Hospital** Vellore, Vellore, Tamil Nadu, India. Rabies encephalitis is a fulminant, almost universally fatal infection involving the central nervous system. A unique treatment protocol, including anti-exicitotoxic therapy and induced coma was credited with the survival of a vaccinated teenager with bat rabies encephalitis in 2005. However, multiple efforts to replicate this expensive and intense protocol have not been successful. In this article, we report the failure of the protocol in Indian patients with canine-acquired rabies and elucidate the potential explanations for the failure of the protocol in our patients.	**INT**	**JUL TO DEC**	**INFECTIOUS DISEASES, MEDICINE, NEUROLOGICAL SCIENCES**	**PMID:**29141755 **Impact Factor:**2.549 **H-Index:** 126
360.	Manesh, A., Moorthy, M., Bandopadhyay, R. and Rupali, P. HIV-associated sub-acute sclerosing panencephalitis - an emerging threat? Int J STD AIDS; 2017, 956462416687675 **Address:** 1 Department of Infectious Diseases, **Christian Medical College, Vellore,** India. 2 Department of Clinical Virology, **Christian Medical College, Vellore,** India.	**INT**	**JAN TO JUN**	**INFECTIOUS DISEASES, CLINICAL VIROLOGY**	**PMID:**28077023 **Impact Factor:**1.350 **H-Index:** 66

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Earlier age of measles virus infection predisposes to development of sub-acute sclerosing panencephalitis (SSPE) and this risk is heightened in HIV-infected children. We describe a HIV-infected young adult on antiretroviral therapy, presenting with a non-classical, fulminant form of SSPE to highlight the unpredictable nature of measles presentation. The recent spate of measles outbreaks due to virus introduction in populations with sub-optimal vaccine coverage or waning immunity and co-existing paediatric HIV cohorts is a cause for concern.				
361.	Mani, S. S. R. and Iyyadurai, R. Cloxacillin induced agranulocytosis: A rare adverse event of a commonly used antibiotic Int J Immunopathol Pharmacol; 2017, 30 (3): 297-301 **Address:** Department of Medicine, **Christian Medical College, Vellore,** India. Cloxacillin, a semisynthetic penicillin is a potent inhibitor of most penicillinase-producing Staphylococci. Use of high doses of Cloxacillin for 6 weeks is recommended for the treatment of infective endocarditis caused by methicillin-susceptible Staphylococcus aureus (MSSA). Here, we report a case of Cloxacillin-induced agranulocytosis in a patient treated for MSSA native tricuspid valve endocarditis, which was resolved after discontinuation of the antibiotic. This case report highlights a rare adverse event of a commonly used antibiotic.	**INT**	**JUL TO DEC**	**MEDICINE UNIT I**	**PMID:**28786715 **Impact Factor:**2.347 **H-Index:** 42
362.	Mani, S. S. R., Mathansingh, A. J., Kaur, H. and Iyyadurai, R. Ruptured intracranial tuberculous aneurysm, a rare complication of central nervous system tuberculosis- A report and review of literature Neurol India; 2017, 65 (3): 626-628 **Address:** Department of Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India.☐Department of Radiology, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JAN TO JUN**	**MEDICINE UNIT I, RADIOLOGY**	**PMID:**28488632 **Impact Factor:** 1.758 **H-Index:** 39
363.	Mani, S. S., Kodiatte, T. and Jagannati, M. A rare presentation of plasmablastic lymphoma as cutaneous nodules in an	**INT**	**JAN TO JUN**	**GENERAL MEDICINE, GENERAL PATHOLOGY**	**PMID:**27738277 **Impact Factor:** 1.350 **H-Index:** 66

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	immunocompromised patient Int J STD AIDS; 2017, 28 (6): 623-625 **Address:** 1 Department of General Medicine, **Christian Medical College, Vellore,** India. 2 Department of General Pathology, **Christian Medical College, Vellore,** India. Plasmablastic lymphoma is a rare entity accounting for around 2.7% of all AIDS-related lymphomas. The oral cavity and gastrointestinal tract are the most common sites involved. We report a case of a 34-year-old HIV-positive woman with a rare presentation of cutaneous nodules all over the body. Due to overwhelming tumour burden, she developed tumour lysis syndrome during her hospital stay and succumbed to the illness.				
364.	Mani, V. and George, R. Satoyoshi syndrome-A case report from India Pediatr Dermatol; 2017, 34 (6): e296-e298 **Address:** Department of Dermatology, Venereology & Leprosy, **Christian Medical College and Hospital, Vellore**, TN, India. Satoyoshi syndrome was first reported in Japan in 1967. It is a rare multisystem disorder of presumed autoimmune etiology that is characterized by alopecia, intermittent painful muscle spasms, diarrhea, and antinuclear antibody positivity. We report an 11-year-old girl with Satoyoshi syndrome who presented to the dermatology department for treatment of alopecia universalis. We present this case to emphasize the importance of recognizing Satoyoshi syndrome, which could go unnoticed if not suspected.	**INT**	**JUL TO DEC**	**DERMATOLOGY**	**PMID:**28940615 **WOS:**000415350800001 **Impact Factor:** 0.990 **H-Index:** 62
365.	Mann, J. F. E., Orsted, D. D., Brown-Frandsen, K., Marso, S. P., Poulter, N. R., Rasmussen, S., Tornoe, K., Zinman, B. and Buse, J. B. Liraglutide and Renal Outcomes in Type 2 Diabetes N Engl J Med; 2017, 377 (9): 839-848 doi: 10.1056/NEJMoa1616011. **Address:** From KfH Kidney Center, Munich, and Friedrich Alexander University of Erlangen, Erlangen - both in Germany (J.F.E.M.); Novo Nordisk, Bagsvaerd, Denmark (D.D.O., K.B.-F., S.R., K.T.); University of Texas Southwestern Medical	**INT**	**JUL TO DEC**	**ENDOCRINOLOGY**	**PMID:**28854085 **Indexed in PubMed** **Impact Factor:** 72.4

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Center, Dallas (S.P.M.); Imperial College London, London (N.R.P.); Lunenfeld-Tanenbaum Research Institute, Mt. Sinai Hospital, University of Toronto, Toronto (B.Z.); and University of North Carolina School of Medicine, Chapel Hill (J.B.B.). BACKGROUND: In a randomized, controlled trial that compared liraglutide, a glucagon-like peptide 1 analogue, with placebo in patients with type 2 diabetes and high cardiovascular risk who were receiving usual care, we found that liraglutide resulted in lower risks of the primary end point (nonfatal myocardial infarction, nonfatal stroke, or death from cardiovascular causes) and death. However, the long-term effects of liraglutide on renal outcomes in patients with type 2 diabetes are unknown. METHODS: We report the prespecified secondary renal outcomes of that randomized, controlled trial in which patients were assigned to receive liraglutide or placebo. The secondary renal outcome was a composite of new-onset persistent macroalbuminuria, persistent doubling of the serum creatinine level, end-stage renal disease, or death due to renal disease. The risk of renal outcomes was determined with the use of time-to-event analyses with an intention-to-treat approach. Changes in the estimated glomerular filtration rate and albuminuria were also analyzed. RESULTS: A total of 9340 patients underwent randomization, and the median follow-up of the patients was 3.84 years. The renal outcome occurred in fewer participants in the liraglutide group than in the placebo group (268 of 4668 patients vs. 337 of 4672; hazard ratio, 0.78; 95% confidence interval [CI], 0.67 to 0.92; P=0.003). This result was driven primarily by the new onset of persistent macroalbuminuria, which occurred in fewer participants in the liraglutide group than in the placebo group (161 vs. 215 patients; hazard ratio, 0.74; 95% CI, 0.60 to 0.91; P=0.004). The rates of renal adverse events were similar in the liraglutide group and the placebo group (15.1 events and 16.5 events per 1000 patient-years), including the rate of acute kidney injury (7.1 and 6.2 events per 1000 patient-years, respectively). CONCLUSIONS: This prespecified secondary analysis shows that, when added to usual care, liraglutide resulted in lower rates of the development and progression of diabetic kidney disease than placebo. (Funded by Novo Nordisk and the National Institutes of Health; LEADER ClinicalTrials.gov number, NCT01179048).				
366.	Manoharan, R., Jacob, T., Benjamin, S. and Kirishnan, S. Lateral Anal Sphincterotomy for Chronic Anal Fissures- A Comparison of Outcomes and Complications under Local Anaesthesia Versus Spinal Anaesthesia	**INT**	**JAN TO JUN**	**PAEDIATRIC SURGERY**	**PMID:**28274000 **Impact Factor:** 0.650 **H-Index:** 18

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	J Clin Diagn Res; 2017, 11 (1): PC08-PC12 **Address:** Consultant Surgeon, Department of General Surgery, Tribal Health Initiative, Dharmapuri, Tamil Nadu, India. Assistant Professor, Department of Paediatric Surgery, **Christian Medical College,** ISSCC Building, Vellore, Tamil Nadu, India. Professor, Department of General Surgery, NH Narayana Multispecialty Clinic, Bengaluru, Karnataka, India. Consultant Surgeon, Department of General Surgery, Christian Fellowship Hospital, Oddanchatram, Tamil Nadu, India. **INTRODUCTION:** Fissure-in-Ano is one of the common and most painful anorectal conditions encountered in surgical practice. Inspite of several conservative treatment options, surgical treatment in the form of Lateral Anal Spincterotomy (LAS) remains the gold standard of treatment for Chronic Anal Fissures (CAF). However, LAS is often done under spinal or general anaesthesia incurring huge treatment costs and hospital stay. **AIM:** To study if LAS can be treated with Local Anaesthesia (LA) thereby, reducing the costs and the anaesthetic risk to patients with no significant change in the surgical ease or clinical outcome. **MATERIALS AND METHODS:** A total of 79 patients with chronic fissure underwent randomized allocation to two treatment arms - The first to undergo LAS under LA and the second under Spinal Anaesthesia (SA). The primary outcome variables studied were complications like post-operative pain, infections, healing rate of fissure and incontinence rates. Secondary outcome variables studied were cost, hospital stay and need for additional anaesthetic. **RESULTS:** A total of 79 patients underwent LAS procedure. A total of 42 patients had LA and 39 patients had SA. There was no statistically significant difference in the healing rate, pain, infection and incontinence rates between the two groups. Moreover, the LA group incurred lower cost, reduced hospital stay and reduced risk of anaesthesia. **CONCLUSIONS:** LAS can be satisfactorily performed under local anaesthesia with no increased risk of pain or complications, and is best suited for resource-poor surgical settings.				
367.	Manuel, D. A., Ghosh, G. C. and Alex, A. G. Atrial septal defect with right-to-left shunt in the absence of pulmonary hypertension Cardiol Young; 2017, 27 (3): 575-576 **Address:** Department of Cardiology, **Christian Medical College and**	**INT**	**JAN TO JUN**	**CARDIOLOGY**	**PMID:**28093089 **Impact Factor:** 0.905 **H-Index:** 44

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Hospital,Vellore,India. We describe the case of a 27-year-old gentleman who developed late-onset clubbing and cyanosis. Transoesophageal echocardiography revealed a 27-mm ostium secundum atrial septal defect and a large, floppy Eustachian valve directing right atrial blood to the left side of the heart.				
368.	Manuel, D. A., Sahayo, B. J., Thomson, V. S. and Jose, J. Pseudoaneurysm of the left atrium following infective endocarditis Ann Pediatr Cardiol; 2017, 10 (1): 84-86 **Address:** Department of Cardiology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Transthoracic echocardiogram of a 3-year-old child showed a hypoechoic cavity in the posterior wall of the left atrium communicating with the left ventricle through an orifice in the mitral annulus, suggestive of pseudoaneurysm (Ps), probably the result of infective endocarditis. Three-dimensional echocardiography was helpful to confirm the diagnosis and assess the anatomical relationship of the Ps.	**INT**	**JAN TO JUN**	**CARDIOLOGY**	**PMID:**28163437 **Impact Factor:** 0.770 **H-Index:** 13
369.	Mariappan, R., Philip, A., Gandham, E. J. and Raju, K. Simultaneous Surgical Decompression of Bilateral Subdural Hematoma and an Administration of Epidural Blood Patch for Spontaneous Intracranial Hypotension J Neurosurg Anesthesiol; 2017, **Address:** Departments of *Anesthesia daggerNeurological Sciences, **Christian Medical College, Vellore,** TN, India.	**INT**	**JAN TO JUN**	**ANESTHESIA, NEUROLOGICAL SCIENCES**	**PMID:**28538330 **Impact Factor:** 3.925 **H-Index:** 52
370.	Mariappan, R., Singh, G. and Koshy, M. S. The Effect of Increased Intracranial Pressure on Pulmonary Compliance in a Neonate J Neurosurg Anesthesiol; 2017, 29 (1): 66-67 **Address:** Department of Anesthesia, **Christian Medical College, Vellore,** Tamil	**INT**	**JAN TO JUN**	**ANESTHESIA**	**PMID:**26649769 **Impact Factor:** 3.925 **H-Index:** 52

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Nadu India.				
371.	Mariappan, Ramamani, George, Leah and Vaz, Tina Do we need a running line for administration of vasopressors through the multi-lumen central venous catheter during neurosurgical cases? Journal of Neuroanaesthesiology and Critical Care; 2017, 4 (1): 59-60 **Address:** Department of Anaesthesia, **Christian Medical College, Vellore,** Tamil Nadu, India	**NAT**	**JAN TO JUN**	**ANAESTHESIA**	**Not Indexed in PubMed**
372.	Mascarenhas, M., Sunkara, S. K., Antonisamy, B. and Kamath, M. S. Higher risk of preterm birth and low birth weight following oocyte donation: A systematic review and meta-analysis Eur J Obstet Gynecol Reprod Biol; 2017, 218 60-67 **Address:** Leeds Centre for Reproductive Medicine, Leeds Teaching Hospital NHS Trust, United Kingdom. Queen's Hospital, Barking Havering Redbridge University Hospitals NHS Trust, Essex, United Kingdom. Department of Biostatistics, **Christian Medical College Hospital, Vellore,** India. Reproductive Medicine Unit, **Christian Medical College Hospital, Vellore** 632004, India. Electronic address: dockamz@gmail.com. OBJECTIVES: To perform a systematic review and meta-analysis of the known literature to assess whether the perinatal outcomes are different after oocyte donation (OD) compared to autologous oocyte (AO) in vitro fertilization (IVF) pregnancies. STUDY DESIGN: A systematic literature search was done for studies published in English from 1980 to 2016. Studies comparing perinatal outcomes of pregnancies following fresh or frozen OD and AO IVF were included. Meta-analysis was performed using the Rev Man 5.3 software (Cochrane Collaboration) for the perinatal outcomes of PTB (<37 weeks), early PTB (<32 weeks), LBW (<2500g), very LBW (<1500g), and SGA (<10th centile). Six studies provided data on PTB, three studies on early PTB, five studies on LBW, four studies on very LBW and three studies on SGA after fresh embryo transfer. Two studies provided data on PTB, early PTB, LBW and very LBW after frozen embryo transfer. RESULTS: There is an increased risk of PTB following fresh embryo transfer in OD pregnancies than in AO IVF pregnancies (OR 1.45, 95% CI 1.20-1.77). If the PTB risk is assumed to be to 9% for pregnancies following AO IVF, then OD pregnancies will have a PTB risk between 10.8% and 15.9%. Similarly, the risk of LBW is higher after fresh	**INT**	**JUL TO DEC**	**BIOSTATISTICS, REPRODUCTIVE MEDICINE UNIT**	**PMID:**28942045 **Impact Factor:** 1.666 **H-Index:** 83

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	embryo transfer in OD pregnancies than AO IVF pregnancies (OR 1.34, 95% CI 1.12-1.60). If the assumed LBW risk is 9% for AO IVF pregnancies, then OD pregnancies have a LBW risk between 10.1% and 14.4%. There is an increased risk of early PTB (OR 2.14, 95% CI 1.40-3.25) and very LBW (OR 1.51, 95% CI 1.17-1.95) in a fresh embryo transfer after OD as compared to AO IVF pregnancies. CONCLUSIONS: There appears to be a higher risk of adverse perinatal outcomes following fresh OD compared to AO IVF pregnancies.				
373.	Mathew, A. J., Bird, P., Gupta, A., George, R. and Danda, D. Magnetic resonance imaging (MRI) of feet demonstrates subclinical inflammatory joint disease in cutaneous psoriasis patients without clinical arthritis Clin Rheumatol. 2017 Dec 4. doi: 10.1007/s10067-017-3895-z. [Epub ahead of print] **Address:** Department of Clinical Immunology & Rheumatology, **Christian Medical College, Vellore,** 632 004, India. University of NSW, Sydney, Australia. Department of Dermatology, **Christian Medical College, Vellore,** India. Department of Clinical Immunology & Rheumatology, **Christian Medical College, Vellore,** 632 004, India. debashisdandacmc@hotmail.com. We evaluated inflammation at the small joints of feet in psoriasis patients without clinical arthritis (PsO) as against clinically overt psoriatic arthritis (PsA) patients, using a low field magnet extremity MRI (eMRI). Patients with psoriasis recruited from dermatology and rheumatology clinics of a tertiary care institution in southern India were divided into PsO and PsA groups. Demographic and physical examination details were recorded. Consenting patients underwent non-contrast eMRI of the right foot. Two trained readers scored the MRI parameters of inflammation (synovitis, tenosynovitis, osteitis) using a modification of the PsA magnetic resonance imaging score (PsAMRIS). Proportion of patients with any sign of MRI inflammation was noted. Clinical variables were compared with inflammation scores for any association. A total of 83 patients (30 PsA and 53 PsO), with 75% males and mean age of 42.2 +/- 11.6 years were included. There was no statistical difference between the median eMRI inflammatory scores in PsA and PsO patients (p = 0.493). Evidence of inflammation was present in 33.9% and 50% patients in the PsO and PsA groups, respectively. Early arthritis for psoriatic patients screening questionnaire (EARP) score of >/= 3 was significantly associated	**INT**	**JUL TO DEC**	**CLINICAL IMMUNOLOGY & RHEUMATOLOGY, DERMATOLOGY**	**PMID:**29204762 **WOS:**000413181402193 **Impact Factor:** 2.365 **H-Index:** 68

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	with imaging features of inflammation in PsO group (p = 0.044). This study corroborates a high proportion of subclinical inflammation in small joints of foot in PsO patients, which needs to be reproduced in larger, longitudinal cohorts to predict risk factors for progression to future PsA development.				
374.	Mathew, A. J., Coates, L. C., Danda, D. and Conaghan, P. G. Psoriatic arthritis: lessons from imaging studies and implications for therapy Expert Rev Clin Immunol; 2017, 13 (2): 133-142 **Address:** a Clinical Immunology & Rheumatology, **Christian Medical College, Vellore,** India. b Leeds Institute of Rheumatic and Musculoskeletal Medicine, University of Leeds & NIHR Leeds Musculoskeletal Biomedical Research Unit, Leeds, UK. **INTRODUCTION:** Modern imaging may aid in the diagnosis, prognosis and monitoring of therapeutic response in psoriatic arthritis (PsA). Detection of osteitis and technical advances like whole body magnetic resonance imaging (MRI) exemplify the value of this technology. Areas covered: Ultrasound (US) provides a clinic-based tool for evaluating both joint pathologies and extra-articular structures (especially enthesitis) including skin and nail disease. Recent studies have demonstrated subclinical disease in psoriasis without arthritis, as well as in PsA, with implications for diagnosis and treatment classification. Modern imaging can also facilitate decisions on tapering of expensive biologics, though real-world clinical studies are still lacking. Expert commentary: The increase in novel PsA therapies should increase the utilization of modern imaging, providing both increased validation of imaging biomarkers as well as responsive outcome measures.	**INT**	**JAN TO JUN**	**CLINICAL IMMUNOLOGY & RHEUMATOLOGY**	**PMID:**27487860 **Impact Factor:**3.270 **H-Index:** 33
375.	Mathew, A. J., Ganapati, A., Kabeerdoss, J., Nair, A., Gupta, N., Chebbi, P., Mandal, S. K. and Danda, D. Chikungunya Infection: a Global Public Health Menace Curr Allergy Asthma Rep; 2017, 17 (2): 13 **Address:** Department of Clinical Immunology and Rheumatology, **Christian**	**INT**	**JAN TO JUN**	**CLINICAL IMMUNOLOGY & RHEUMATOLOGY**	**PMID:**28233156 **Impact Factor:** 3.735 **H-Index:** 50

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Medical College, Vellore, 632 004, India. Department of Clinical Immunology and Rheumatology, **Christian Medical College, Vellore,** 632 004, India. debashisdandacmc@hotmail.com. Chikungunya virus (CHIKV) has been involved in epidemics in African and Asian subcontinents and, of late, has transcended to affect the Americas. Aedes aegypti and Aedes albopictus are the major vectors for CHIKV infection, which results in dissemination of virus to various vital organs. Entry of virus into these tissues causes infiltration of innate immune cells, monocytes, macrophages, neutrophils, natural killer cells, and adaptive immune cells. Macrophages bearing the replicating virus, in turn, secrete pro-inflammatory cytokines IL-1beta, TNF-alpha, and IL-17. Together, this pro-inflammatory milieu induces osteoclastogenesis, bone loss, and erosion. CHIKV is characterized by fever, headache, myalgia, rash, and symmetric polyarthritis, which is generally self-limiting. In a subset of cases, however, musculoskeletal symptoms may persist for up to 3-5 years. Viral culture and isolation from blood cells of infected patients are the gold standards for diagnosis of CHIKV. In routine practice, however, assays for anti-CHIKV IgM antibodies are used for diagnosis, as elevated levels in blood of infected patients are noted from 10 days following infection for up to 3-6 months. Early diagnosis of CHIKV is possible by nucleic acid detection techniques. Treatment of acute CHIKV is mainly symptomatic, with analgesics, non-steroidal anti-inflammatory agents (NSAIDs), and low-dose steroids. No vaccines or anti-viral medicines have been approved for clinical therapy in CHIKV as yet. Hydroxychloroquine and methotrexate have been used in chronic CHIKV infection with variable success.				
376.	Mathew, A. J., Ganapati, A., T, S. K., Goel, R., P, S. and Danda, D. Real-life Safety Profile of ZRC3197 (Adalimumab Biosimilar) in Indian Patients with Common Rheumatic Diseases J Assoc Physicians India; 2017, 65 (5): 30-32 **Address:** Clinical Immunology and Rheumatology. Child Health - Pediatric Rheumatology, **Christian Medical College, Vellore,** Tamil Nadu. The advent of biologic therapies has brought in significant improvement in the outcome of patients suffering from chronic inflammatory arthritis. High costs and unavailability have however, limited their utility in some parts of the world. These limitations have been overcome to a good extent by the introduction of biosimilar	**NAT**	**JUL TO DEC**	**CLINICAL IMMUNOLOGY & RHEUMATOLOGY**	**PMID:**28836749 **Impact Factor:** 0.370 **H-Index:** 48

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	versions of original products, which are gaining momentum, of late. Adalimumab (Humira(R)), a TNF-alpha inhibitor has been successfully used in patients with inflammatory arthritis for more than a decade now. ZRC3197 (Adalimumab Biosimilar) was developed in India and approved for use since 2014. Ongoing evaluation of safety in real-world setting outside the context of controlled clinical trials is pivotal in ensuring long-term safety of such biologic therapies. We share the real-life safety profile of biosimilar Adalimumab in patients with chronic inflammatory arthritis and other autoimmune conditions from a tertiary care centre in south India.				
377.	Mathew, D. J., Arthur, A. and John, S. S. Presumed Chemotherapy-Induced Optic Neuropathy and Maculopathy: A Case Report Open Ophthalmol J; 2017, 11 298-304 **Address:** Department of Ophthalmology, **Christian Medical College, Vellore** 632001, Tamil Nadu, South India. Purpose: With the advent of more aggressive cytotoxic chemotherapy regimens, the incidence of ocular toxicity due to these drugs is also on the rise. We report a case of Presumed Chemotherapy-Induced optic neuropathy and maculopathy secondary to treatment with cytarabine and daunorubicin for Acute Myeloid Leukaemia (AML). Case report: A 50-year-old man with AML developed sudden decrease in vision in his left eye after three cycles of chemotherapy with cytarabine and daunorubicin. He presented to us six weeks later with bilateral optic atrophy and foveal atrophic changes with early bull's eye maculopathy. A diagnosis of presumed chemotherapy-induced optic neuropathy with maculopathy was made, and the patient was put on an alternative chemotherapeutic regimen. There was no further decrease in vision on follow up. Conclusion: To the best of our knowledge, this is the first report of clinically demonstrable macular toxicity in the form of macular atrophic changes and bull's eye maculopathy associated with the use of cytarabine and daunorubicin. Early diagnosis and appropriate management of such cases is imperative to prevent further visual deterioration.	**INT**	**JUL TO DEC**	**OPHTHALMOLOGY**	**PMID:**29299076 **PMCID:**5725519 **Impact Factor:** 1.280 **H-Index:** 11
378.	Mathew, G., Gupta, V., Santhanam, S. and Rebekah, G. Postnatal Weight Gain Patterns in Preterm Very-Low-Birth-Weight Infants Born in a	**INT**	**JAN TO JUN**	**NEONATOLOGY, BIOSTASTICS**	**PMID:**28582577 **Impact Factor:** 1.093

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Tertiary Care Center in South India J Trop Pediatr; 2017, **Address:** Department of Neonatology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu 632004, India.☐Department of Biostatistics, **Christian Medical College and Hospital, Vellore**, Tamil Nadu 632004, India.☐☐**BACKGROUND:** Extrauterine growth retardation is a common problem in preterm, very-low-birth-weight (VLBW) babies, as well as paucity of growth charts that follow their postnatal growth. **AIM:** To evaluate and plot postnatal weight gain patterns of preterm VLBW babies of <34 weeks' gestation born at a tertiary care neonatal unit in South India. **METHODS:** Weight gain patterns of all preterm (27 to < 34 weeks' gestation) and VLBW (<1500 g) neonates were used for plotting the centile curves by retrospective review of electronic medical records. The growth velocity was calculated from birth and from the time baby regained their birth weight. **RESULTS:** Mean growth rate (+/-SD) of these babies was 16.2 +/- 2.4 g/kg/day and average time to regain birth weight was 14.2 days (range 12.0-17.6). **CONCLUSION:** The recommended growth velocity of 10-15 g/kg/day can be achieved using unfortified expressed breast milk, though at higher feeding volumes of 200 ml/kg/day. These centile curves can be useful for monitoring postnatal growth.				**H-Index:** 44
379.	Mathew, S. K., Naik, G. S. and Peedicayil, J. Inhibition by Benidipine of Contractility of Isolated Proximal and Distal Caprine Ureter Int J Appl Basic Med Res; 2017, 7 (3): 155-159 **Address:** Department of Pharmacology and Clinical Pharmacology, **Christian Medical College, Vellore,** Tamil Nadu, India. CONTEXT: Benidipine is a calcium channel blocker that blocks all the major types (L, N, and T) of calcium channels. It has been shown to inhibit the contractility of many isolated smooth muscles but not isolated ureter. AIMS: This study evaluated the ability of benidipine to inhibit the spontaneous contractility of isolated proximal and distal caprine (goat) ureter. SETTINGS AND DESIGN: Spontaneous contractility of isolated goat ureter was recorded using a physiograph. MATERIALS AND METHODS: Benidipine at concentrations in the range of 1 nM to 10 muM was analyzed for its inhibitory effects on the spontaneous contractility of the isolated	**INT**	**JUL TO DEC**	**PHARMACOLOGY AND CLINICAL PHARMACOLOGY**	**PMID:**28904913 **PMCID:**5590376 **Impact Factor:** NA **H-Index:** NA

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	proximal and distal caprine ureter. STATISTICAL ANALYSIS USED: Both parametric and nonparametric statistical tests were used. RESULTS: The EC50 of benidipine for inhibiting contractility in the distal ureter was found to be 54.68 nM. Benidipine was found to have a greater inhibitory effect on the distal ureter than on the proximal ureter. It was also found to inhibit amplitude of spontaneous ureteric contractility more readily than the frequency of spontaneous ureteric contractility. CONCLUSIONS: These results suggest that benidipine has differential inhibitory effects on the spontaneous contractility of the isolated ureter. Benidipine could be useful in the management of clinical conditions like ureteric colic due to its inhibitory effects on the contractility of the ureter.				
380.	Mathew. A,J.,, A., Viswanathan, S., S, M. A., Sebastian, P., C, K. P., A, G. K., Pisharody, S., Mathew, R. and Jeyasheelan, L. The design and rationale of the primary angioplasty registry of Kerala Indian Heart J; 2017, 69 (6): 777-783 **Address:** Lisie Hospital, Kochi, Kerala, India. Electronic address: drjabi@yahoo.co.in; MOSC Medical College, Kolencherry, Kerala, India. Electronic address: anoopmatts@gmail.com; Government Medical College, Thiruvanathapuram, Kerala, India. Electronic address: sunuthaviswan@gmail.com; Sahakarana Medical College, Pariyaram, Kannur, Kerala, India. Electronic address: ashsmfz@yahoo.com; Sahakarana Medical College, Pariyaram, Kannur, Kerala, India. Electronic address: placidseb@gmail.com; Jubilee Mission Medical College, Thrissur, Kerala, India. Electronic address: pkumarck@gmail.com; Government Medical College, Thiruvanathapuram, Kerala, India. Electronic address: ageorgekoshy@gmail.com; E M S Co-operative Hospital, Perinthalmanna, Kerala, India. Electronic address: sunilpisharody@yahoo.co.in; Lisie Hospital, Kochi, Kerala, India. Electronic address: drronymathew@yahoo.com; **Christian Medical College, Vellore,** Tamilnadu, India. Electronic address: IJey@hotmail.com BACKGROUND: ST-elevation myocardial infarction (STEMI) continues to be a major cause of cardiovascular mortality in Kerala, India. Timely primary percutaneous coronary intervention (PCI) is the recommended reperfusion strategy for STEMI. There is limited data on the safety, effectiveness, equity and efficiency of regional primary PCI services in India. METHODS/DESIGN: The primary angioplasty registry of Kerala is a clinician-initiated prospective state-wide longitudinal hospital-based registry of patients undergoing primary PCI for STEMI. The registry aims to	**NAT**	**JUL TO DEC**	**CARDIOLOGY, BIOSTATISTICS**	**PMID:**29174258 **PMCID:**5717295 **Indexed in PubMed, Embase, ICI,** **Impact Factor:0.610** **H Index-32**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	document the efficacy and safety of the real world use of primary PCI in Indian patients presenting with STEMI, in order to achieve regional adoption of global standard performance indicators. In addition, the registry would analyze procedural variations in the performance of primary PCI and assess its impact on relevant patient centered outcomes. We plan to enroll 6000 STEMI patients, undergoing primary PCI, across 48 hospitals. These patients would be followed up for a minimum of 1year. CONCLUSIONS: The primary angioplasty registry of Kerala would help analyze the quality and outcomes of primary PCI services in Kerala, thereby yielding insights that can help limit unacceptable procedural variations in the performance of primary PCI. Identifying deviations from guideline based therapies can form the basis of quality improvement programs, which in turn will enable hospitals to achieve better patient outcomes.				
381.	Mathews, Vikram. APL: Oh! What a tangled web we weave Blood; 2017, 129 (13): 1744-1745 **Address: Christian Medical College, Vellore**.	**INT**	**JAN TO JUN**	**CLINICAL HAEMATOLOGY**	**PMID:**28360358 **Impact Factor:** 13.164 **H-Index:** 394
382.	Mathur, P., Veeraraghavan, B., Devanga Ragupathi, N. K., Inbanathan, F. Y., Khurana, S., Bhardwaj, N., Kumar, S., Sagar, S. and Gupta, A. First Report on a Cluster of Colistin-Resistant Klebsiella pneumoniae Strains Isolated from a Tertiary Care Center in India: Whole-Genome Shotgun Sequencing Genome Announc; 2017, 5 (5): **Address:** Department of Laboratory Medicine, All India Institute of Medical Sciences, New Delhi, India. Department of Clinical Microbiology, **Christian Medical College, Vellore,** India vbalaji@cmcvellore.ac.in Department of Clinical Microbiology, **Christian Medical College, Vellore,** India. Klebsiella pneumoniae is a nosocomial pathogen with clinical importance due to its increasing resistance to carbapenems and colistin. Here, we report the genome sequences of eight colistin-resistant K. pneumoniae strains which might help in understanding the molecular mechanism of the species. The sequence data indicate genomes of ~5.2 to 5.4 Mb, along with several plasmids.	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY**	**PMID:**28153885 **Impact Factor:** NA **H-Index:** 14

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
383.	Mathuram, A. J., Michael, J. S., Turaka, V. P., Jasmine, S., Carey, R. and Ramya, I. Mycobacterial blood culture as the only means of diagnosis of disseminated tuberculosis in advanced HIV infection Trop Doct; 2017, 49475517747491 **Address:** 1 Professor of Medicine, Department of Medicine, 30025 **Christian Medical College, Vellore** , Tamil Nadu, India. 2 Professor of Microbiology, Department of Microbiology, 30025 **Christian Medical College, Vellore** , Tamil Nadu, India. 3 Assistant Professor of Medicine, Department of Medicine, 30025 **Christian Medical College, Vellore** , Tamil Nadu, India. 4 Associate Professor of Medicine, Department of Medicine, 30025 **Christian Medical College, Vellore** , Tamil Nadu, India. The diagnosis of disseminated tuberculosis (TB) in advanced HIV infection is often delayed because of difficulty in obtaining suitable specimens for culture. A total of 32 such patients from South India with positive mycobacterial blood cultures were studied over ten years. Almost all (90%) had a febrile illness and the majority (68.7%) had clinical lung involvement, but only 27.3% had positive sputum smears. Liver biopsy yielded a positive diagnosis in only 1/7. Cytopenia was almost universal (96.9%). Bone marrow cultures were, however, positive in 54.8%, of whom one-quarter grew atypical mycobacteria. Mycobacterial blood culture is therefore a useful adjunct test to diagnose TB in advanced HIV.	**INT**	**JUL TO DEC**	**MEDICINE, CLINICAL MICROBIOLOGY,**	**PMID:**29235968 **Impact Factor:** 0.450 **H-Index:** 28
384.	Matthai, S. M., Jacob, S., Palak, R., Jagdish, K., Varughese, S. and Tamilarasi, V. Crescentic C3 glomerulopathy with acquired partial lipodystrophy: An unusual cause of rapidly progressive renal failure Indian J Pathol Microbiol; 2017, 60 (2): 290-291 **Address:** Wellcome Trust Research Laboratory, Division of GI Sciences, Central Electron Microscopy Unit, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Nephrology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Pathology, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JAN TO JUN**	**WELLCOME TRUST RESEARCH LABORATORY , NEPHROLOGY , PATHOLOGY**	**PMID:**28631660 **Impact Factor:** 0.616 **H-Index:** 25
385.	Matthai, S. M., Mohapatra, A., Palak, R. and Basu, G. Immunoglobulin G4-related tubulointerstitial nephritis: A not to be missed diagnosis Indian J Pathol Microbiol; 2017, 60 (4): 577-580	**NAT**	**JAN TO JUNE**	**WELLCOME TRUST RESEARCH**	**PMID:29323079** **Impact Factor:**0.616

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Department of Nephrology and Pathology, Central Electron Microscopy Unit, Wellcome Trust Research Laboratory, Division of GI Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. Immunoglobulin G4-related tubulointerstitial nephritis (IgG4-TIN) is a newly recognized clinicopathological entity characterized by a dense interstitial infiltrate of IgG4-positive plasma cells accompanied by fibrosis and obliterative phlebitis causing acute or chronic renal dysfunction amenable to corticosteroid therapy. IgG4-TIN is the dominant manifestation of renal involvement in IgG4-related disease (IgG4-RD) which is a novel, immune-mediated, fibroinflammatory and multiorgan disorder. We describe a case of IgG4-TIN with isolated renal involvement in an elderly male patient with poor response to corticosteroid therapy. The distinctive serological, histopathological, and ultrastructural features of this condition which can facilitate differential diagnosis of TIN are highlighted to emphasize the need for early diagnosis and preservation of kidney function			**LABORATORY AND GI SCIENCES**	**H-Index:** 25
386.	Matthew Wood1, Arie Perry1, Andrey Korshunov2, Geeta Chacko3, Cunfeng Pu4, Christopher Payne5, Serguei Bannykh6, Clinton Turner7, Tarik Tihan1, David Solomon1 Genetic Features of Astroblastoma by Targeted Next-Generation Sequencing: Lack of Unifying Alterations Across Eight Cases American Association of Neuropathologists, Inc. Abstracts of the 93rd Annual Meeting June 8–11, 2017 Garden Grove, CA, *Journal of Neuropathology &Experimental Neurology*, Volume 76, Issue 6, 1 June 2017, Pages 491–546 (Journal of Neuropathology and Experimental Neurology; 2017, 76 (6): 498-498) https://doi.org/10.1093/jnen/nlx029 **AUTHOR INFORMATION:** 1Division of Neuropathology, University of California San Francisco; 2Department of Neuropathology, University Hospital; 3Division of Neuropathology, **Christian Medical College**; 4Department of Pathology, Allegheny General Hospital; 5Department of Neurosurgery, Allegheny General Hospital; 6Department of Pathology, Cedars-Sinai Medical Center; 7Department of Anatomical Pathology, LabPlus, Auckland City Hospital Aim: Astroblastoma is a rare and controversial central nervous system tumor with unpredictable clinical behavior. The diagnosis is based on histology, and no defining genetic alterations are known. We therefore sought to determine the spectrum of genetic alterations that characterize this entity.	**INT**	**JUL TO DEC**	**NEUROPATHOLOGY**	**NO PMID** **WOS:**000404906900035 **Impact Factor:** 3.503 **H-Index:** 144

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Methods: We performed targeted next-generation sequencing of approximately 500 cancer-related genes on tumor DNA to identify somatic mutations, copy number alterations, and structural variations in eight tumors with a histologic diagnosis of astroblastoma. Results: Tumors occurred in patients from 9 to 73 years of age, and all tumors were located in the cerebral hemispheres. The clinical course was variable: two patients underwent multiple resections over 15-20 years, while two patients died within 2 years of initial resection. One tumor had a glioblastoma-like genetic profile, including TERT promoter hotspot mutation, TP53 and NRAS mutations, CDK4 amplification, chromosome 7 gain, and chromosome 10 loss. Two cases were genetically similar to pleomorphic xanthoastrocytoma, with combined TERT promoter mutation and homozygous deletion of CDKN2A/B, one of which also had a BRAF p.V600E mutation. Two other cases had TP53 mutation combined with numerous whole chromosome losses. One of these cases also had PTEN mutation, as commonly seen in high-grade astrocytomas. One case had a structural rearrangement involving the NF2 gene, occurring with a pathogenic mutation of ATM. Only nonspecific chromosomal gains and losses were detected in the final two cases, without focal amplifications, deep deletions, or pathogenic mutations. Conclusions: This genetic study of eight astroblastoma cases revealed a wide range of genetic alterations, which often overlapped with other tumor subtypes. No alterations were common to all tumors in this series. These genetic data raise the possibility that astroblastoma is a histologic pattern rather than a specific entity. We are pursuing additional studies of these tumors by methylation profiling, attempting to refine their classification.				
387.	Maziarz, R. T., Brazauskas, R., Chen, M., Mcleod, A. A., Martino, R., Wingard, J. R., Aljurf, M., Battiwalla, M., Dvorak, C. C., Geroge, B., Guinan, E. C., Hale, G. A., Lazarus, H. M., Lee, J. W., Liesveld, J. L., Ramanathan, M., Reddy, V., Savani, B. N., Smith, F. O., Strasfeld, L., Taplitz, R. A., Ustun, C., Boeckh, M. J., Gea-Banacloche, J., Lindemans, C. A., Auletta, J. J. and Riches, M. L. Pre-existing invasive fungal infection is not a contraindication for allogeneic HSCT for patients with hematologic malignancies: a CIBMTR study Bone Marrow Transplant; 2017, 52 (2): 270-278	**INT**	**JAN TO JUN**	**HEMATOLOGY**	**PMID:**27991895 **Impact Factor:** 3.874 **H-Index:** 113

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Adult Blood and Marrow Stem Cell Transplant Program, Knight Cancer Institute, Oregon Health and Science University, Portland, OR, USA. CIBMTR, Department of Medicine, Medical College of Wisconsin, Milwaukee, WI, USA. Division of Biostatistics, Institute for Health and Society, Medical College of Wisconsin, Milwaukee, WI, USA. Division of Clinical Hematology, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain. Division of Hematology & Oncology, Department of Medicine, University of Florida, Gainesville, FL, USA. Department of Oncology, King Faisal Specialist Hospital Center & Research, Riyadh, Saudi Arabia. Hematology Branch, National Heart, Lung and Blood Institute, Bethesda, MD, USA. Department of Pediatrics, University of California San Francisco Medical Center, San Francisco, CA, USA. Department of Hematology, **Christian Medical College, Vellore,** India. Department of Pediatric Oncology, Dana-Farber Cancer Institute, Boston, MA, USA. Department of Hematology/Oncology, All Children's Hospital, St Petersburg, FL, USA. Seidman Cancer Center, University Hospitals Case Medical Center, Cleveland, OH, USA. BMT Center, Seoul St Mary's Hospital, The Catholic University of Korea, Seoul, South Korea. Department of Medicine, University of Rochester Medical Center, Rochester, NY, USA. Division of Hematology and Oncology, Department of Medicine, UMass Memorial Medical Center, Worcester, MA, USA. Department of Internal Medicine, University of Central Florida College of Medicine, Orlando, FL, USA. Division of Hematology/Oncology, Department of Medicine, Vanderbilt University Medical Center, Nashville, TN, USA. University of Cincinnati Cancer Institute, Cincinnati, OH, USA. Infectious Disease Clinic, Oregon Health and Science University, Portland, OR, USA. Infectious Diseases Program, UC San Diego Health, La Jolla, CA, USA. Division of Hematology, Oncology and Transplantation, Department of Medicine, University of Minnesota Medical Center, Minneapolis, MN, USA. Vaccine and Infectious Disease Division, Fred Hutchinson Cancer Research Center, Seattle, WA, USA. Experimental Transplantation and Immunology Branch, National Institutes of Health-National Cancer Institute, Bethesda, MD, USA. Pediatric Blood and Marrow Transplantation Program, University Medical Center Utrecht, Utrecht, Netherlands. Divisions of Hematology/Oncology, Bone Marrow Transplantation and Infectious Diseases, Nationwide Children's Hospital, Columbus, OH, USA. Division of Hematology/Oncology, The University of North Carolina at Chapel Hill, Chapel Hill, NC, USA. Patients with prior invasive fungal infection (IFI) increasingly proceed to allogeneic				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	hematopoietic cell transplantation (HSCT). However, little is known about the impact of prior IFI on survival. Patients with pre-transplant IFI (cases; n=825) were compared with controls (n=10247). A subset analysis assessed outcomes in leukemia patients pre- and post 2001. Cases were older with lower performance status (KPS), more advanced disease, higher likelihood of AML and having received cord blood, reduced intensity conditioning, mold-active fungal prophylaxis and more recently transplanted. Aspergillus spp. and Candida spp. were the most commonly identified pathogens. 68% of patients had primarily pulmonary involvement. Univariate and multivariable analysis demonstrated inferior PFS and overall survival (OS) for cases. At 2 years, cases had higher mortality and shorter PFS with significant increases in non-relapse mortality (NRM) but no difference in relapse. One year probability of post-HSCT IFI was 24% (cases) and 17% (control, P<0.001). The predominant cause of death was underlying malignancy; infectious death was higher in cases (13% vs 9%). In the subset analysis, patients transplanted before 2001 had increased NRM with inferior OS and PFS compared with later cases. Pre-transplant IFI is associated with lower PFS and OS after allogeneic HSCT but significant survivorship was observed. Consequently, pre-transplant IFI should not be a contraindication to allogeneic HSCT in otherwise suitable candidates. Documented pre-transplant IFI is associated with lower PFS and OS after allogeneic HSCT. However, mortality post transplant is more influenced by advanced disease status than previous IFI. Pre-transplant IFI does not appear to be a contraindication to allogeneic HSCT.				
388.	Mccormick, B. J., Lee, G. O., Seidman, J. C., Haque, R., Mondal, D., Quetz, J., Lima, A. A., Babji, S., **Kang, G.,** Shrestha, S. K., Mason, C. J., Qureshi, S., Bhutta, Z. A., Olortegui, M. P., Yori, P. P., Samie, A., Bessong, P., Amour, C., Mduma, E., Patil, C. L., Guerrant, R. L., Lang, D. R., Gottlieb, M., Caulfield, L. E. and Kosek, M. N. Dynamics and Trends in Fecal Biomarkers of Gut Function in Children from 1-24 Months in the MAL-ED Study Am J Trop Med Hyg; 2017, 96 (2): 465-472 **Address:** Fogarty International Center/National Institutes of Health, Bethesda, Maryland. Tulane University, New Orleans, Louisiana. International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b), Dhaka, Bangladesh. Universidade Federal do Ceara, Fortaleza, Brazil. **Christian Medical College,**	**INT**	**JAN TO JUN**	**WELLCOMME RESEARCH UNIT**	**PMID:**27994110 **Impact Factor:** 2.549 **H-Index:** 126

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Vellore, India. Walter Reed/Armed Forces Research Institute of Medical Science (AFRIMS) Research Unit, Kathmandu, Nepal. Aga Khan University, Karachi, Pakistan. Asociacion Benefica Proyectos en Informatica, Salud, Medicina, y Agricultura (A. B. PRISMA), Iquitos, Peru. University of Venda, Thohoyandou, South Africa. Haydom Lutheran Hospital, Haydom, Tanzania. University of Illinois at Chicago, Chicago, Illinois. University of Virginia, Charlottesville, Virginia. Foundation for the National Institutes of Health, Bethesda, Maryland. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland. Growth and development shortfalls that are disproportionately prevalent in children living in poor environmental conditions are postulated to result, at least in part, from abnormal gut function. Using data from The Etiology, Risk Factors, and Interactions of Enteric Infections and Malnutrition and the Consequences for Child Health and Development (MAL-ED) longitudinal cohort study, we examine biomarkers of gut inflammation and permeability in relation to environmental exposures and feeding practices. Trends in the concentrations of three biomarkers, myeloperoxidase (MPO), neopterin (NEO), and alpha-1-antitrypsin (AAT), are described from fecal samples collected during the first 2 years of each child's life. A total of 22,846 stool samples were processed during the longitudinal sampling of 2,076 children 0-24 months of age. Linear mixed models were constructed to examine the relationship between biomarker concentrations and recent food intake, symptoms of illness, concurrent enteropathogen infection, and socioeconomic status. Average concentrations of MPO, NEO, and AAT were considerably higher than published references for healthy adults. The concentration of each biomarker tended to decrease over the first 2 years of life and was highly variable between samples from each individual child. Both MPO and AAT were significantly elevated by recent breast milk intake. All three biomarkers were associated with pathogen presence, although the strength and direction varied by pathogen. The interpretation of biomarker concentrations is subject to the context of their collection. Herein, we identify that common factors (age, breast milk, and enteric infection) influence the concentration of these biomarkers. Within the context of low- and middle-income communities, we observe concentrations that indicate gut abnormalities, but more appropriate reference standards are needed.				
389.	Mendenhall, I. H., Manuel, M., Moorthy, M., Lee, T. T. M., Low, D. H. W., Misse, D., Gubler, D. J., Ellis, B. R., Ooi, E. E. and Pompon, J. Peridomestic Aedes malayensis and Aedes albopictus are capable vectors of	**INT**	**JAN TO JUN**	**CLINICAL VIROLOGY**	**PMID:**28650959 **Impact Factor:** 3.834 **H-Index:** 87

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	arboviruses in cities PLoS Negl Trop Dis; 2017, 11 (6): e0005667 **Address:** Program in Emerging Infectious Disease, Duke-NUS Medical School, Singapore. Department of Clinical Virology, **Christian Medical College, Vellore,** Tamilnadu, India. Department of Biological Sciences, National University of Singapore, Singapore. MIVEGEC, UMR IRD 224-CNRS5290-Universite de Montpellier, Montpellier, France. **BACKGROUND:** Dengue and chikungunya are global re-emerging mosquito-borne diseases. In Singapore, sustained vector control coupled with household improvements reduced domestic mosquito populations for the past 45 years, particularly the primary vector Aedes aegypti. However, while disease incidence was low for the first 30 years following vector control implementation, outbreaks have re-emerged in the past 15 years. Epidemiological observations point to the importance of peridomestic infection in areas not targeted by control programs. We investigated the role of vectors in peri-domestic areas. **METHODS:** We carried out entomological surveys to identify the Aedes species present in vegetated sites in highly populated areas and determine whether mosquitoes were present in open-air areas frequented by people. We compared vector competence of Aedes albopictus and Aedes malayensis with Ae. aegypti after oral infection with sympatric dengue serotype 2 and chikungunya viruses. Mosquito saliva was tested for the presence of infectious virus particles as a surrogate for transmission following oral infection. **RESULTS:** We identified Aedes albopictus and Aedes malayensis throughout Singapore and quantified their presence in forested and opened grassy areas. Both Ae. albopictus and Ae. malayensis can occupy sylvatic niches and were highly susceptible to both arboviruses. A majority of saliva of infected Ae. malayensis contained infectious particles for both viruses. **CONCLUSIONS:** Our study reveals the prevalence of competent vectors in peri-domestic areas, including Ae. malayensis for which we established the vector status. Epidemics can be driven by infection foci, which are epidemiologically enhanced in the context of low herd immunity, selective pressure on arbovirus transmission and the presence of infectious asymptomatic persons, all these conditions being present in Singapore. Learning from Singapore's vector control success that reduced domestic vector populations, but has not sustainably reduced				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	arboviral incidence, we suggest including peri-domestic vectors in the scope of vector management.				
390.	Michael, A. J., Antonisamy, B., Gowri, S. M. and Prakash, R. Modelling the risk factors for birth weight in twin gestations: a quantile regression approach J Biosoc Sci; 2017, 1-13 **Address:** Department of Biostatistics, **Christian Medical College,** Vellore,India. Birth weight is used as a proxy for the general health condition of newborns. Low birth weight leads to adverse events and its effects on child growth are both short- and long-term. Low birth weight babies are more common in twin gestations. The aim of this study was to assess the effects of maternal and socio-demographic risk factors at various quantiles of the birth weight distribution for twin gestations using quantile regression, a robust semi-parametric technique. Birth records of multiple pregnancies from between 1991 and 2005 were identified retrospectively from the birth registry of the **Christian Medical College and Hospital**s in Vellore, India. A total of 1304 twin pregnancies were included in the analysis. Demographic and clinical characteristics of the mothers were analysed. The mean gestational age of the twins was 36 weeks with 51% having preterm labour. As expected, the examined risk factors showed different effects at different parts of the birth weight distribution. Gestational age, chroniocity, gravida and child's sex had significant effects in all quantiles. Interestingly, mother's age had no significant effect at any part of the birth weight distribution, but both maternal and paternal education had huge impacts in the lower quantiles (10th and 25th), which were underestimated by the ordinary least squares (OLS) estimates. The study shows that quantile regression is a useful method for risk factor analysis and the exploration of the differential effects of covariates on an outcome, and exposes how OLS estimates underestimate and overestimate the effects of risk factors at different parts of the birth weight distribution.	**INT**	**JAN TO JUN**	**BIOSTATISTICS**	**PMID:**28238291 **Impact Factor:**1.188 **H-Index:** 44
391.	Mini Joseph*, Riddhi Das Gupta, Praveen Gangadhara, Vijayalakshmi Anand, Ruth Volena, Nithya Devanithi, Asha Hesarghatta Shyamasunder and Nihal Thomas Barriers to Nutritional Practices and Dietary Education in Patients with Type 1 Diabetes Mellitus in India. *J Global Diabetes Clin Metab*. 2017 Feb V-2, No 1	**INT**	**JAN-JUN**	**ENDOCRINOLOGY**	Not Indexed in PubMed

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College, Vellore,** Tamil Nadu, India **Abstract** Type 1 diabetes mellitus (T1DM) affects a significant proportion of young adults Indians with Diabetes mellitus. Appropriate nutrition therapy is essential to sustain good glycaemic control and avoid hypoglycaemia. Preliminary study amongst these patients indicated a poor nutrient intake with a deficit in macronutrients and micronutrients. Hence the main objective of this study was to assess the major barriers to good nutrition in this group of patients. This cross-sectional study was conducted amongst 110 young adults with Type 1 diabetes mellitus (18-45 years of age) followed up at the Young Adults Type 1 Diabetes mellitus clinic of Christian Medical College & Hospital, Vellore. The major barriers to good nutrition practices were classified based on our previous study on eating disorders in T1DM) into (i) Barriers to compliance to diabetes care education imparted at the clinic (ii) Barriers to following the appropriate principles of medical nutrition therapy (iii) Barriers to complying with the 3 meal/ 3 snack pattern. The responses were elicited using open ended and closed ended questions and their food diaries were used to validate their responses. The data was collected from the patient by the dietitian during one of their routine hospital visits over a period of 6 months. Time constraints related to work and study responsibilities were the major hindrance to dietary compliance in this young adult population. Lack of proper awareness about the importance of nutritional principles in diabetes was also a significant hindrance to the treatment process. Other issues faced by a minority of patients include a lack of support from the family, work colleagues and peers, while affordability was an issue in a small number of these patients. Lack of confidence and a low self-esteem was a barrier in following the general dietary advice imparted at the clinic in a proportion of the study population. The study throws light on the need to coordinate meal pattern and timings with the work schedule of Type 1 Diabetes mellitus patients. There is a need to enhance the availability of cost effective, easy to prepare and nutrient rich foods especially when dining out. The importance of meal dependant insulin dose adjustments should be reinforced at every hospital visit. Our study is the first of its kind to highlight specific barriers to nutritional practices and dietary education in T1DM patients from India.				
392.	Mini Joseph, Riddhi Das Gupta, Sahana Shetty, Roshna Ramachandran,Geethu Antony, Jiji Mathews, Santhosh Benjamin, Shajith Anoop, Jansi Vimala Rani, Nihal Thomas How Adequate are Macro- and Micronutrient Intake in Pregnant Women with	**NAT**	**JUL TO DEC**	**ENDOCRINOLOGY, GYNAECOLOGY AND**	**NO PMID** **Impact Factor:** 0.240 **H-Index:** 8

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Diabetes Mellitus? A Study from South India The Journal of Obstetrics and Gynecology of India; 2017, 1-8 DOI 10.1007/s13224-017-1069-1 **Author Affiliation:** 1.Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College and Hospital, Vellore**, India 2.Department of Gynaecology and Obstetrics, **Christian Medical College and Hospital, Vellore**, India **Background:**Diabetes is the most common condition in pregnancy with a worldwide prevalence of 16.9%. **Aim** To determine the adequacy of the nutrient intake of pregnant women with diabetes mellitus. **Methods** This is a cross-sectional study of 85 pregnant women who met the diagnostic inclusion criteria for diabetes mellitus (gestational and pre-gestational diabetes mellitus) and who were being managed at the outpatient clinic of a tertiary care teaching hospital. Their demography, clinical characteristics (from updated medical records), anthropometric measures (using standard procedures), nutrient intake and meal pattern (obtained using 24 h recall, food frequency and their log diaries) were collected. **Results** The mean age of the group was 29.9 + 4.5 years, 54% were in the second trimester of pregnancy with a mean glycosylated haemoglobin level of 6.3 + 1.4%. The mean BMI indicated that 47% of them were in the obese grade 1 category. Insulin was used in one-third of the population. The overall macronutrient and micronutrient intakes of the population were below the recommended daily allowances for Indians (60–70% of RDA). There was a deficit in the intake of calories, fibre, proteins, iron, calcium, carotene, folic acid, thiamine, riboflavin and niacin. Between the two groups, the pre-GDM women had a significantly better nutrient intake and this could be attributed to a greater exposure to nutrition counselling that they have received during the earlier part of their diabetes care. **Conclusion** The gestational period should be viewed as a window of opportunity to modify dietary patterns and introduce healthy lifestyle practices for the woman and her family.			**OBSTETRICS,**	
393.	Miraclin, A. T., Mani, S. S., Suresh, S. and Iyyadurai, R. Septicemic Melioidosis with Ruptured Splenic Abscess in a Patient with Thalassemia Intermedia J Glob Infect Dis; 2017, 9 (1): 32-33	**INT**	**JAN TO JUN**	**GENERAL MEDICINE**	**PMID:**28250624 **Impact Factor:** 0.820 **H-Index:** 16

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Department of Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India.				
394.	Miraclin, A. T., Perumalla, S. K., Daniel, J. and Sathyendra, S. Abiotrophia defectiva endarteritis with infective spondylodiscitis in an adult patient with patent ductus arteriosus BMJ Case Rep; 2017, 2017 **Address:** Department of General Medicine, **Christian Medical College and Hospital, Vellore**, India angel_miraclin@yahoo.com Department of Clinical Microbiology, **Christian Medical College and Hospital, Vellore**, India. Department of General Medicine, **Christian Medical College and Hospital, Vellore**, India. Endarteritis is a major complication in patients with patent ductus arteriosus, causing significant morbidity and mortality. We report an adult patient with asymptomatic patent ductus arteriosus and endarteritis involving the main pulmonary artery and secondary infective spondylodiscitis at the L5-S1 intervertebral disc caused by Abiotrophia defectivaA. defectiva, commonly referred to as nutritionally variant streptococci, cannot be identified easily by conventional blood culture techniques from clinical specimens. Its isolation was confirmed by 16S ribosomal RNA sequencing. The patient was successfully managed with a combination of penicillin G and gentamicin, pending surgical repair of the patent ductus arteriosus.	**INT**	**JAN TO JUN**	**GENERAL MEDICINE, CLINICAL MICROBIOLOGY**	**PMID:**28389466 **Impact Factor:** NA **H-Index:** 11
395.	Mirza, H., Roberts, E., Al-Belushi, M., Al-Salti, H., Al-Hosni, A., Jeyaseelan, L. and Al-Adawi, S. School Dropout and Associated Factors Among Omani Children with Attention-Deficit Hyperactivity Disorder: A Cross-Sectional Study J Dev Behav Pediatr; 2017, **Address:** *Department of Behavioural Medicine, Sultan Qaboos University Hospital, Muscat, Oman; daggerDepartment of Psychological Medicine, King's College London, London, United Kingdom; double daggerCollege of Medicine and Health Sciences, Sultan Qaboos University, Muscat, Oman; section signDepartment of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India; ||Department of Behavioural Medicine, Sultan Qaboos University, Muscat, Oman.	**INT**	**JUL TO DEC**	**BIOSTATISTICS**	**PMID:**29084072 **Impact Factor:** 2.393 **H-Index:** 86

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	OBJECTIVE: Despite the rising incidence of attention-deficit hyperactivity disorder (ADHD), there is a dearth of studies examining the rate of school dropout and its correlates in non-Western populations. METHODS: Medical records were scrutinized to identify Omani children diagnosed with ADHD from 2006 to 2014 in a tertiary care hospital in Oman. The persistence of ADHD symptoms, school performance and dropout, as well as sociodemographic characteristics were examined. RESULTS: Three hundred sixty-seven children fulfilled the diagnosis of ADHD based on Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition) (DSM-IV) criteria and 16.6% of them had dropped out of school. School dropout was associated with poor school performance, comorbid conduct disorder, and parental divorce. CONCLUSION: This study from Oman concurs with existing literature that school dropout is common among children with ADHD. Concerted efforts are needed to mitigate this trend. Management strategies should incorporate the treatment of comorbid conduct disorder.				
396.	Mishra, A. K., Arvind, V. H., Muliyil, D., Kuriakose, C. K., George, A. A., Karuppusami, R., Benton Carey, R. A., Mani, S. and Hansdak, S. G. Cerebrovascular injury in cryptococcal meningitis Int J Stroke; 2017, 1747493017706240 **Address:** Department of General Medicine, **Christian Medical College and Hospital, Vellore**, India. Background Cryptococcal meningitis continues to be one of the common causes of chronic central nervous system infection worldwide. Individuals with cryptococcal meningitis can occasionally present with small vessel vasculitis causing infarcts primarily in the basal ganglia, internal capsule, and thalamus. Literature regarding patterns of cerebrovascular injury among patients with cryptococcal meningitis is scanty, and outcome following these vascular involvements is unknown. Aim To study the clinical profile, imaging findings, and details of vascular territory involved among patients admitted with cryptococcal meningitis and central nervous system infarct in a tertiary care center from India. And to compare the outcomes of patients of cryptococcal meningitis with or without central nervous system infarcts in terms of mortality and morbidity, Methodology A total of 151 patients with microbiologically proven cryptococcal meningitis over a time span of 11 years were retrospectively enrolled into the study. Of these, 66 patients met the inclusion	**INT**	**JAN TO JUN**	**GENERAL MEDICINE, RADIOLOGY**	**PMID:**28421878 **Impact Factor:** 3.314 **H-Index:** 46

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	criteria of having appropriate imaging of the brain. The presence of infarct in the imaging was analyzed by two independent radiologists. Patterns of central nervous system involvement and types of vascular injury were ascertained based on radiological parameters. Clinical parameters and outcomes of patients with and without infarcts were compared. Results Twenty (13%) of these patients had evidence of central nervous system infarcts on imaging. The mean age of patients with and without infarcts was 41 years and 38 years, respectively. Male predominance was present among both the groups. The presence of fever, neck stiffness, positive blood culture, and hydrocephalus in central nervous system imaging was similar among patients with or without infarct. Longer duration of illness, low sensorium at the time of presentation, low Glasgow Coma Scale score, presence of meningeal inflammation, cryptococcomas, and basal exudates in imaging were higher in patients with infarct. All the infarcts were of the lacunar type. Sixty percent of the cerebrovascular infarcts were acute in nature, 50% of these being multiple. Unilateral infarcts were seen in 70% of the patients. The most common site of infarct was the basal ganglia, others being distributed over the thalamus, frontal, temporal, parieto-occipital regions in the descending order. The presence of neurovascular involvement in the form of infarcts to the risk of morbidity and mortality had an odds ratio of 9.1 and 2.6, respectively. Conclusion Neurovascular involvement in chronic cryptococcal meningitis is a rare entity. These tend to present as multiple lacunar infarcts. Mortality and morbidity associated with these patients is higher when compared to patients who do not have infarcts. This result suggests that vascular injury plays a role in predicting outcome of patients with cryptococcal meningitis. Future studies are needed to understand the mechanism by which vascular events (infarcts) occur and result in poor outcome.				
397.	Mishra, A. K., Devakiruba, N. S., Jasmine, S., Sathyendra, S., Zachariah, A. and Iyadurai, R. Clinical spectrum of yellow phosphorous poisoning in a tertiary care centre in South India: a case series Trop Doct; 2017, 47 (3): 245-249 **Address:** 1 Assistant Professor, Internal Medicine Unit III, **Christian Medical College and Hospital** Vellore, Tamil Nadu, India. 2 Associate Professor, Internal Medicine Unit III, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. 3 Professor, Internal Medicine Unit III, **Christian Medical College and Hospital,**	**INT**	**JUL TO DEC**	**MEDICINE UNIT III, MEDICINE UNIT I, MEDICINE UNIT V**	**PMID:**27663491 **Impact Factor:** 0.450 **H-Index:** 28

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Vellore, Tamil Nadu, India. 4 Head of the Department and Professor, Internal Medicine Unit I, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. 5 Associate Professor, Internal Medicine Unit V, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Rodenticides such as yellow phosphorus are highly toxic compounds which are commonly used for pest control. Reports of yellow phosphorus poisoning from tropical nations is scanty. In this retrospective study, we report the clinical features, mortality and predictors of mortality among nine patients at a tertiary care centre in south India. Yellow phosphorus consumption was common among a younger age group of patients. The mean duration of presentation after consumption was five days. The most common clinical manifestations seen were abdominal pain and vomiting followed by a depressed sensorium. Features of acute liver failure including coagulopathy were seen in all patients. Despite all patients receiving supportive therapy, a poor outcome or death resulted in the majority. Early referral to a tertiary care centre, meticulous monitoring and supportive measures are key elements of patient management as there are no specific antidotes available at present. Increase in public and physician awareness to the toxin and implementation of preventive policies is of utmost importance.				
398.	Mishra, A. K., George, A. A. and Peter, D. Annular cutaneous sarcoidosis with systemic involvement J Family Med Prim Care; 2017, 6 (3): 660-662 Address: Department of Internal Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Dermatology, **Christian Medical College, Vellore,** Tamil Nadu, India. Sarcoidosis is a granulomatous disease involving multiple systems. Cutaneous involvement is present in 25% of patients. A 42-year-old woman presented with itchy skin lesions on her face for 5 years duration. She was found to have annular and discoid plaques with prominent overlying telangiectasia. A biopsy from the plaque was suggestive of sarcoidosis. On further evaluation, she was found to have both pulmonary and ocular involvements. Annular sarcoidosis is a rare variant of cutaneous sarcoidosis. We report this case to highlight this rare variant of sarcoidosis and discuss the various cutaneous manifestations of sarcoidosis.	**INT**	**JAN TO JUNE**	**INTERNAL MEDICINE, DERMATOLOGY**	**PMID:29417028** **PMC ID:5787975** **Impact Factor:** 0.670 **H-Index:** NA
399.	Mishra, A. K., Iyadurai, R., George, A. A., Rajdurai, E. and Surekha, V. Etiological and clinicopathological study of secondary small vessel vasculitis in elderly: A case series of 12 patients	**NAT**	**JUL TO DEC**	**DERMATOLOGY, GERIATRICS**	**PMID:**29026760 **PMCID:**5629871 **Impact Factor:**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	J Family Med Prim Care; 2017, 6 (1): 106-109 **Address:** Department of Internal Medicine, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Dermatology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Geriatrics, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. BACKGROUND: Inflammation involving the postcapillary venular wall is defined as small vessel vasculitis. Small vessel vasculitis has various clinical manifestations. Etiologically, it can be primary or secondary. Literature regarding secondary vasculitis in elderly is scanty. AIM AND OBJECTIVES: In this case series, we aimed to assess the clinical features and etiologies of biopsy-proven secondary small vessel vasculitis in the elderly. METHODOLOGY: Twelve elderly patients with biopsy-proven small vessel vasculitis were included in this study. All patients were thoroughly evaluated to assess the etiology and presence of major organ involvement. RESULTS: Secondary small vessel vasculitis involved both the sexes equally. Constitutional symptoms including fever and weight loss were noticed by most of the (70%) patients. Neurological deficits were present in 83% of the study population. The most common finding in an electromyographic examination was an asymmetric sensory motor distal predominant polyradiculopathy. Fifty percent of the patients did fulfill the criteria for a definite autoimmune disease. More than 30% of the vasculitis was secondary to malignancies. CONCLUSIONS: Neurological manifestations are the most common systemic involvement in elderly patients with secondary vasculitis. Meticulous search for underlying malignancies is mandatory in elderly patients with secondary small vessel vasculitis.				0.670 **H-Index:** NA
400.	Mishra, A. K., Kharkongor, M., Kuriakose, C. K., George, A. A., Peter, D., Carey, R. A. B., Mathew, V. and Hansdak, S. G. Is Ross Syndrome an Autoimmune Entity? A Case Series of 11 Patients Can J Neurol Sci; 2017, 44 (3): 318-321 **Address:** 1Department of General Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. 2Department of Dermatology, Venereology and Leprosy,	**INT**	**JAN TO JUN**	**GENERAL MEDICINE, DERMATOLOGY, NEUROLOGY**	**PMID:**28488950 **Impact Factor:** 0.952 **H-Index:** 56

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Christian Medical College, Vellore, Tamil Nadu, India. 3Department of Neurology, **Christian Medical College, Vellore,** Tamil Nadu,India. **BACKGROUND:** Ross syndrome is diagnosed by the presence of segmental anhidrosis, areflexia, and tonic pupils. Fewer than 60 cases have been described in literature so far. There have been reports of presence of antibodies in such patients, suggesting an autoimmune pathogenesis. **METHODS:** We describe the clinical profile in this case series of 11 patients with Ross syndrome and discuss the current status of autoimmunity in its pathogenesis and the management. **RESULTS:** Of the 11 patients with Ross syndrome there was an almost equal sex distribution (male:female ratio was 1.17:1) and the mean age of onset of symptoms was 26 years. Patients took an average of 6 years to present to a tertiary center. Sixty-three percent of the patients presented with complaints of excessive sweating, whereas only 27% had complaints of decreased sweating over a particular area of the body. Only 45% of the patients had the complete triad of Ross syndrome, which included segmental anhidrosis, tonic pupil, and absent reflexes. Eighty-nine percent of the patients had documented absent sympathetic skin response on electromyography. The various markers of autoimmunity were negative in all patients who were investigated for the same in this series. Ninety percent of the patients were managed conservatively. **CONCLUSIONS:** These findings suggest that, in Ross syndrome, generalized injury to ganglion cells or their projections are not purely autoimmune-mediated.				
401.	Mishra, A. K., Vanjare, H. A. and Raj, P. M. Cryptococcal meningitis presenting as acute onset bilateral cerebellar infarct J Neurosci Rural Pract; 2017, 8 (1): 159-160 **Address:** Department of Internal Medicine, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India.Department of Radiology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Clinical Microbiology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India.	**INT**	**JAN TO JUN**	**INTERNAL MEDICINE, RADIOLOGY, CLINICAL MICROBIOLOGY**	**PMID:**28149116 **Impact Factor:** 0.700 **H-Index:** 13
402.	Mishra, Ajay Are corticosteroid useful in HIV-associated cryptococcal meningitis? Current Medical Issues; 2017, 15 (1): 66-67 **Address:** Department of General Medicine, **CMC, Vellore**, Tamil Nadu, India	**NAT**	**JAN TO JUN**	**MEDICINE UNIT V**	**Not Indexed in PubMed**
403.	Mishra, Ajay Kumar, George, Anu Anna and Peter, Dincy	**NAT**	**JUL TO**	**DERMATOLOG**	**PMID:**PMC57879

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Annular cutaneous sarcoidosis with systemic involvement Journal of Family Medicine and Primary Care; 2017, 6 (3): 660-662 doi: 10.4103/2249-4863.222012. **Author information:** 1.Department of Internal Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. 2. Department of Dermatology, **Christian Medical College, Vellore,** Tamil Nadu, India. Sarcoidosis is a granulomatous disease involving multiple systems. Cutaneous involvement is present in 25% of patients. A 42-year-old woman presented with itchy skin lesions on her face for 5 years duration. She was found to have annular and discoid plaques with prominent overlying telangiectasia. A biopsy from the plaque was suggestive of sarcoidosis. On further evaluation, she was found to have both pulmonary and ocular involvements. Annular sarcoidosis is a rare variant of cutaneous sarcoidosis. We report this case to highlight this rare variant of sarcoidosis and discuss the various cutaneous manifestations of sarcoidosis.		**DEC**	**Y**	75
404.	Mishra, S., Ramakrishnan, S., Babu, A. S., Roy, A., Bahl, V. K., Singru, K. V., Chugh, S., Sengupta, S., Kaul, U., Boopathy, S. N., Nirmit, Y., Jadhav, U. M., Jose, J., Gupta, V., Chopra, H. K., Singh, A., Sastry, B. K. and Thiyagarajan, S. Management algorithms for acute ST elevation myocardial infarction in less industrialized world Indian Heart J; 2017, 69 Suppl 1 S98-S103 **Address:** AIIMS, New Delhi, India. Electronic **Address:** sundeepmishraihj@gmail.com. AIIMS, New Delhi, India. Department of Physiotherapy, School of Allied Health Sciences, Manipal University, Manipal 576104, Karnataka, India. Department of Cardiology, AIIMS, New Delhi, India. PES-IMSR Superspeciality Hospital, Kuppam, District Chittoor, Andhra Pradesh, India. Interventional Cardiology & HOD Cardiology, The Mission Hospital, Durgapur, India. Sengupta Hospital and Research Institute, Nagpur, Maharashtra, India. Clinical Research, Fortis Health Care, Fortis Escorts Heart Institute, Okhla Road, New Delhi 110025, India. Apollo Speciality Hospitals, Vanagram, Chennai, India. Medical College Vadodara, Vadodara, India. Department of Cardiology, MGM New Bombay Hospital, New Mumbai 400702, India. **Christian Medical College**	**NAT**	**JAN TO JUN**	**CARDIOLOGY**	**PMID:**28400044 **Impact Factor:** 0.610 **H-Index:** 32

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Hospital Vellore, Vellore 632004, India. Dept of Medicine, Kishori Ram Hospital & Diabetes Care Centre, Kishori Ram Road, Basant Vihar, Bhatinda, India. Moolchand Medicity, New Delhi, India. Cardiology Department, LTMGH Sion, Mumbai, India. CARE Hospitals, Hyderabad, India. Dept of Cardiology, BHU, Varanasi, India.				
405.	Mishra, Vineet, Joseph, A, Dutta, Amit, Chowdhury, Sudipto, Kurien, Reuben, Jaiswal, Saurabh, Patnaik, Itish, Kalra, Parika and Rajeeb, Sayd Recurrent acute pancreatitis with anomalous pancreaticobiliary ductal union (Komi's Type IIIc3) with santorinocele in a child: A rare case report Journal of Digestive Endoscopy; 2017, 8 (4): 196-198 **Address:**Department of Gastrointestinal Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India Anomalous pancreaticobiliary ductal union (APBDU) can cause recurrent acute pancreatitis. We describe the case of a 16-year-old boy with recurrent acute pancreatitis. The discussion provides a review of recent literature, supporting use of various diagnostic modalities and surgery as choice of treatment.	**NAT**	**JUL TO DEC**	**GASTROINTESTINAL SCIENCES**	**Indexed in Index Copernicus**
406.	Mistry, P. K., Lukina, E., Ben Turkia, H., Shankar, S. P., Baris, H., Ghosn, M., Mehta, A., Packman, S., Pastores, G., Petakov, M., Assouline, S., Balwani, M., Danda, S., Hadjiev, E., Ortega, A., Gaemers, S. J. M., Tayag, R. and Peterschmitt, M. J. Outcomes after 18 months of eliglustat therapy in treatment-naive adults with Gaucher disease type 1: The phase 3 ENGAGE trial Am J Hematol; 2017, 92 (11): 1170-1176 **Address:** Department of Internal Medicine and Pediatrics, Yale University School of Medicine, New Haven, CT, USA. Department of Orphan Diseases, National Research Center for Hematology, Moscow, Russia. Department of Pediatrics, Hopital La Rabta, Tunis, Tunisia. Department of Human Genetics, Emory University School of Medicine, Atlanta, GA, USA. Raphael Recanati Genetic Institute, Rabin Medical Center, Petach Tikvah, Israel. Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel. The Genetics Institute, Rambam Health Care Campus and The Ruth and Bruce Rappaport Faculty of Medicine, Technion - Israel Institute of Technology, Haifa,	**INT**	**JUL TO DEC**	**MEDICAL GENETICS**	**PMID:**28762527 **PMCID:**5656936 **Impact Factor:**5.275 **H-Index:** 83

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Israel. Department of Hematology-Oncology, Hotel-Dieu de France University Hospital, Beirut, Lebanon. Department of Haematology, The Royal Free Hospital, University College, London, UK. Department of Pediatrics, UCSF School of Medicine, San Francisco, CA, USA. Department of Neurology and Pediatrics, New York University School of Medicine, New York, NY, USA. Department of Neuroendocrinology, Clinical Center of Serbia, Belgrade University Medical School, Serbia. Department of Medicine, Division of Hematology, Jewish General Hospital, Montreal, Quebec, Canada. Department of Genetics and Genomic Sciences, Icahn School of Medicine at Mt. Sinai Hospital, New York, NY, USA. Department of Medical Genetics, **Christian Medical College, Vellore,** Tamil Nadu, India. Medical University - Sofia, Faculty of Medicine, Department of Internal diseases, UMHAT "Alexandrovska"- Clinic of Hematology, Sofia, Bulgaria. OCA Hospital, Monterrey, Mexico. Global Pharmacovigilance, Sanofi Genzyme, Naarden, The Netherlands. Prometrika, Cambridge, MA, USA. Rare Diseases Clinical Development, Sanofi Genzyme, Cambridge, MA, USA. Eliglustat, an oral substrate reduction therapy, is a first-line treatment for adults with Gaucher disease type 1 (GD1) who are poor, intermediate, or extensive CYP2D6 metabolizers (>90% of patients). In the primary analysis of the Phase 3 ENGAGE trial (NCT00891202), eliglustat treatment for 9 months resulted in significant reductions in spleen and liver volumes and increases in hemoglobin concentration and platelet count compared with placebo. We report 18-month outcomes of patients who entered the trial extension period, in which all patients received eliglustat. Of 40 trial patients, 39 entered the extension period, and 38 completed 18 months. Absolute values and percent change over time were determined for spleen and liver volume, hemoglobin concentration, platelet count, bone mineral density, bone marrow burden, and Gaucher disease biomarkers. For patients randomized to eliglustat in the double-blind period, continuing treatment with eliglustat for 9 more months resulted in incremental improvement of all disease parameters. For patients randomized to placebo in the double-blind period,				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	eliglustat treatment during the 9-month, open-label period resulted in significant decrease of spleen and liver volumes and significant increase of hemoglobin and platelets, with a similar rate of change to patients who had received eliglustat in the double-blind period. Eliglustat treatment was also associated with improvement in bone marrow burden score, bone mineral density, and established biomarkers of Gaucher disease, including reduction of the bioactive lipid, glucosylsphingosine. These findings underscore the efficacy of eliglustat in treatment-naive patients. Eliglustat was well-tolerated, and there were no new safety concerns with longer-term exposure.				
407.	Mistry, Pramod K., Lukina, Elena, Ben Turkia, Hadhami, Shankar, Suma, Feldman, Hagit Baris, Ghosn, Marwan, Mehta, Atul, Packman, Seymour, Lau, Heather, Petakov, Milan, Assouline, Sarit, Balwani, Manisha, **Danda, Sumita**, Hadjiev, Evgueniy, Ortega, Andres, Wu, Yaoshi, Gaemers, Sebastiaan J. M. and Peterschmitt, M. Judith Long-term results of ENGAGE: a phase 3, randomized, double blind, placebo-controlled, multi center study investigating the efficacy and safety of eliglustat in adults with type 1 Gaucher disease Molecular Genetics and Metabolism; 2017, 120 (1-2): S97-S98	**INT**	**JUL TO DEC**	**MEDICAL GENETICS**	**NO PMID** **WOS:**000393734000236 **Impact Factor:** 3.769 **H-Index:** 92
408.	Mitra, S., Gautam, I., Jambugulam, M., Abhilash, K. P. and Jayaseeelan, V. Clinical Score to Differentiate Scrub Typhus and Dengue: A Tool to Differentiate Scrub Typhus and Dengue J Glob Infect Dis; 2017, 9 (1): 12-17 **Address:** Department of Emergency Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of General Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India. **BACKGROUND:** Dengue and scrub typhus share similar clinical and epidemiological features, and are difficult to differentiate at initial presentation. Many places are endemic to both these infections where they comprise the majority of acute undifferentiated febrile illnesses. **MATERIALS AND METHODS:** We aimed to develop a score that can differentiate scrub typhus from dengue. In	**INT**	**JAN TO JUN**	**EMERGENCY MEDICINE, GENERAL MEDICINE, BIOSTATISTICS**	**PMID:**28250620 **Impact Factor:**0.820 **H-Index:** 16

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	this cross-sectional study, 188 cases of scrub typhus and 201 cases of dengue infection who presented to the emergency department or medicine outpatient clinic from September 2012 to April 2013 were included. Univariate followed by multivariate logistic regression analysis was performed to identify clinical features and laboratory results that were significantly different between the two groups. Each variable was assigned scores based on the strength of association and receiver operating characteristics area under the curve (ROC-AUC) was generated and compared. Six scoring models were explored to ascertain the model with the best fit. **RESULTS:** Model 2 was developed using the following six variables: oxygen saturation (>90%, </=90%), total white blood cell count (<4000, 4001-7000 and >7000 cells/cumm), hemoglobin (</=14 and >14 g/dL), total bilirubin (<2 and >/=2 mg/dL), serum glutamic oxaloacetic transaminase (>200 and >/=200 IU/dL), and altered sensorium (present or absent). Each variable was assigned scores based on its strength of association. The AUC-ROC curve (95% confidence interval) for model 2 was 0.84 (0.79-0.89). At the cut off score of 13, the sensitivity and specificity were 85% and 77% respectively, with a higher score favoring dengue. **CONCLUSION:** In areas of high burden of ST and dengue, model 2 (the "clinical score to differentiate scrub typhus and dengue fever") is a simple and rapid clinical scoring system that may be used to differentiate scrub typhus and dengue at initial presentation.				
409.	Mittal, G. S., Kumar, S., Thomas, M., Jeyaseelan, V. and George, R. The expression of interleukin-17 in cutaneous lesions of lupus erythematosus in pediatric-onset systemic lupus erythematosus Indian J Pathol Microbiol; 2017, 60 (3): 447-448 **Address:** Department of Dermatology, Venereology and Leprosy, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Paediatrics, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Pathology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JUL TO DEC**	**DERMATOLOGY, PAEDIATRICS, PATHOLOGY, BIOSTATISTICS**	**PMID:**28937401 **Impact Factor:**0.616 **H-Index:** 25
410.	Mogili, K. D., Selliah, H. Y., Chandy, A., Kunjummen, A. T. and Kamath, M. S. Do poor responders have poor perinatal outcomes? A retrospective analysis of 1386 assisted reproductive technology cycles Middle East Fertility Society Journal; 2017, **Address:** Reproductive Medicine Unit, **Christian Medical College, Vellore** 632004, India	**INT**	**JUL TO DEC**	**BIOSTATISTICS**	**NO PMID** **NO PMCID** **SCOPUS** **Impact Factor:** 0.330 **H-Index:** 11

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Biostatistics, **Christian Medical College, Vellore** 632004, India Objective: The purpose of this study was to evaluate whether poor responder women have adverse perinatal outcomes compared to normo responders following assisted reproductive technology (ART). Methods: A retrospective cohort study was conducted in a university level infertility unit between January 2010 to December 2015. Women undergoing fresh IVF cycles were included. Poor responders (≤3 oocytes) and normo responders (4-15 oocytes) were analyzed. Perinatal outcomes such as preterm birth (PTB), low birth weight (LBW), early preterm birth (early PTB) and very low birth weight (very LBW) were recorded. Results: A total of 1386 ART cycles were analyzed. Final analysis included 40 and 318 live births in poor and normo responders respectively. The risk of PTB (30.3% vs. 24.8%; OR 1.32, 95% CI: 0.59-2.9), LBW (33.3% vs. 20.1%; OR 1.99, 95% CI 0.90-4.4), early PTB (3% vs. 2.2%; OR 1.40, 95% CI 0.16-12.4) and very LBW (3% vs. 1.8%: OR 1.72, 95% CI 0.19-15.9) were not significantly different between poor and normo responders. The subgroup analysis within poor responders did not show any significant difference in perinatal outcomes in women aged less and more than 35. years. Conclusion: The current study findings suggest no increased risk of adverse perinatal outcomes in poor responders compared to normo responders following ART. These findings need to be further validated by larger studies. © 2017 Middle East Fertility Society.				
411.	Mohamed, D. S., Ahmed, E. F., Mahmoud, A. M., El-Baky, R. M. A. and John, J. Isolation and Evaluation of cocktail phages for the control of multi-drug resistant Escherichia coli serotype O104: H4 and E. coli O157: H7 isolates causing diarrhea FEMS Microbiol Lett; 2017, **Address:** Microbiology & Immunology Department, Faculty of Pharmacy, Deraya University, Minia, Egypt. Microbiology & Immunology Department, Faculty of Pharmacy, Minia University, Minia, Egypt. DBT-IPLS, Department of Biotechnology, School of Life Science, Pondicherry Central Unversity, Puducherry, India. Department of Clinical Microbiology, **Christian Medical College**& Hopsital, Vellore, India. Escherichia coli serotype O157: H7 and E. coli O104: H4 are well known food borne pathogens causing sever enteric illness. Using bacteriophages as biocontrol agents	**NAT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY**	**PMID:**29253127 **Impact Factor:** 1.765 **H-Index:** 126

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	of some food borne pathogens and multi-drug resistant bacteria has a great attention nowadays. This study aims to test the effect of cocktail phages on the growth of some food borne pathogens and MDR E. coli. Routine conventional PCR was used to confirm the identification of E. coli isolates. Double-layered culture technique was used to isolate phages from sewage water. Morphology of bacteriophage was described using Transmission Electron Microscopy (TEM) and spot test was performed to determine host range of the phage cocktail. Phage Cocktail of Siphoviridae and Podoviridae family infecting E. coli O157: H7, E. coli O104: H4 and untypeable E. coli (neither O157 nor O104) has been isolated from sewage water. Phage cocktail showed both lytic and lysogenic activity. Lytic activity was observed against E. coli O157: H7, E. coli O104: H4 isolates, Staphylococcus. aureus ATCC6538 and Pseudomonas aeruginosa ATCC 10145 while the lysogenic activity was observed against the untypeable strain. The tested phage cocktail showed a promising inhibitory action on E. coli O157: H7 and O104: H4, S. aureus ATCC6538 and P. aeruginosa ATCC 10145, suggesting the possibility of its use as a biocontrol tool or as natural food preservatives for many food products.				
412.	Mohamed, F. and Jehangir, S. Coexistent duplication of urethra and a refluxing ectopic ureter presenting as recurrent epididymo-orchitis in a child BMJ Case Rep; 2017, 2017 **Address:** Department of Paediatric Surgery, **Christian Medical College and Hospital** Vellore, Vellore, India. **Christian Medical College and Hospital** Vellore, Vellore, India. Congenital anomalies of the kidney and urinary tract (CAKUTs) occur in 3-6 per 1000 live births, accounting for most cases of paediatric end-stage kidney disease.(1) However, the molecular basis of CAKUT and anomalies of the external genitalia is poorly understood. We, herein, describe a case with left recurrent epididymo-orchitis with a coexistent urethral duplication and an ectopic ureter with an ipsilateral non-functioning kidney, which is, to the best of our knowledge, the first reported case of its kind. This case may bring about a paradigm shift in our comprehension of the development of the two entities. Understanding the pathogenesis may help develop preventive and renal preservation strategies. The Sonic hedgehog gene and bone morphogenetic protein 4 play crucial roles in preventing anomalies of the ureters and the external genitalia. In this article, we look at possible molecular pathways that could explain the synchronicity of this	**INT**	**JUL TO DEC**	**PAEDIATRIC SURGERY**	**PMID:**28928250 **Impact Factor:** NA **H-Index:** 11

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	rare entity.				
413.	Mohamed, F., Telugu, R. B. and Karl, I. S. Twisted intra-abdominal cyst in a neonate: a surprise revelation BMJ Case Rep; 2017, 2017 **Address:** Department of Paediatric Surgery, **Christian Medical College and Hospital** Vellore, Vellore, Tamil Nadu, India. Department of General Pathology, **Christian Medical College, Vellore,** Tamil Nadu, India. We, herein, present a male neonate with an antenatally detected intra-abdominal cyst who presented at 18 days of life at which time, the ultrasound revealed a 5x4 cm cyst. Since he was asymptomatic, we planned to repeat the ultrasound a month later and operate if the cyst showed no regression. However, a week later, he presented with an acute abdomen, irritable cry and a repeat ultrasound showing a larger (8x6 cm) cystic mass with debris within. He was taken up for an emergency laparotomy. Intraoperatively, the cyst was found arising from the left lateral abdominal wall free from all structures with a twisted pedicle. Histopathology surprisingly revealed seminiferous tubules within the cyst wall with the vas deferens, thus confirming the diagnosis of a torsion of intra-abdominal testis. Hence, we emphasise the importance of examining for an undescended testis when dealing with a male neonate presenting with a cystic intra-abdominal mass.	**INT**	**JUL TO DEC**	**PAEDIATRIC SURGERY, GENERAL PATHOLOGY**	**PMID:**28790029 **Impact Factor:**NA **H-Index:** 11
414.	Mohan, V. R., Ramanujam, K., Babji, S., Mcgrath, M., Shrestha, S., Shrestha, J., Mdumah, E., Amour, C., Samie, A., Nyathi, E., Haque, R., Qureshi, S., Yori, P. P., Lima, A. A. M., Bodhidatta, L., Svensen, E., Bessong, P., Ahmed, T., Seidman, J. C., Zaidi, A. K., Kosek, M. N., Guerrant, R. L., Gratz, J., Platts-Mills, J. A., Lang, D. R., Gottlieb, M., Houpt, E. R. and Kang, G. Rotavirus infection and disease in a multi-site birth cohort: Results from the MAL-ED study J Infect Dis; 2017, 216 (3): 305-316 **Address:** Department of Community Health, **Christian Medical College, Vellore,** India. Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,**	**INT**	**JAN TO JUN**	**COMMUNITY MEDICINE, GASTROINTESTINAL SCIENCES**	**PMID:**28472348 **Impact Factor:** 6.273 **H-Index:** 220

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	India. Fogarty International Center, National Institutes of Health, Bethesda, USA. Walter Reed/ AFRIMS Research Unit Nepal (WARUN) & Centre for International Health, University of Bergen. Haydom Lutheran Hospital, Haydom, Tanzania. University of Venda, Thohoyandou, South Africa. International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh. Aga Khan University, Karachi, Pakistan. Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA and Asociacion Benefica PRISMA, Iquitos, Peru. Clinical Research Unit and Institute of Biomedicine, Federal University of Ceara, Fortaleza, Brazil. Division of Infectious Diseases and International Health, University of Virginia, Charlottesville, USA. Foundation for the National Institutes of Health, Bethesda, USA. **BACKGROUND:** In a multi-country birth cohort study, we describe rotavirus infection in the first two years of life in sites with and without rotavirus vaccination programs. **METHODS:** Children were recruited by 17 days of age and followed to 24 months with collection of monthly surveillance and diarrheal stools. Data on socio-demographics, feeding and illness were collected at defined intervals. Stools were tested for rotavirus and sera for anti-rotavirus immunoglobulins by enzyme immunoassays. **RESULTS:** A total of 1,737 children contributed 22,646 surveillance and 7,440 diarrheal specimens. Overall, rotavirus was detected in 5.5% (408/7440) of diarrheal stools, and 344 (19.8%) children ever had rotavirus gastroenteritis. Household overcrowding and a high pathogen load were consistent risk factors for infection and disease. Three prior infections conferred 74% ($P<0.001$) protection against subsequent infection in sites not using vaccine. In Peru, incidence of rotavirus disease was relatively higher during second year of life despite high vaccination coverage. **CONCLUSIONS:** Rotavirus infection and disease was common, but with significant heterogeneity by site. Protection by vaccination may not be sustained in the second year of life in settings with high burdens of transmission and poor response to oral vaccines.				
415.	Mohanan, E., Panetta, J. C., Lakshmi, K. M., Edison, E. S., Korula, A., Fouzia, N. A., Abraham, A., Viswabandya, A., Mathews, V., George, B., Srivastava, A. and Balasubramanian, P. Population pharmacokinetics of fludarabine in patients with aplastic anemia and Fanconi anemia undergoing allogeneic hematopoietic stem cell transplantation Bone Marrow Transplantation; 2017, 52 (7): 977-983	**INT**	**JAN TO JUN**	**HAEMATOLOGY**	**PMID:**28481355 **WOS:**000404915100007 **Impact Factor:** 3.874 **H-Index:** 113

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Department of Hematology, **Christian Medical College, Vellore,** India. Department of Pharmaceutical Sciences, St. Jude Children's Research Hospital, Memphis, TN, USA. Although hematopoietic stem cell transplantation (HSCT) with a conditioning regimen consisting of fludarabine (F-araA) and cyclophosphamide (Cy) is associated with improved outcome in young patients with aplastic anemia (AA) and Fanconi anemia (FA), several factors limit the success of the procedure. We evaluated the population pharmacokinetics (POPPK) of F-araA and its influence on HSCT outcome in patients (n=53) with AA and FA undergoing HSCT. Patients carrying a 5'-UTR polymorphism in NT5E gene (rs2295890 G>C) exhibited significantly lower plasma F-araA clearance compared to those with wild-type genotype (7.12 vs 5.03 L/h/m2 (29%) P<0.05). F-araA clearance was significantly higher in patients with AA compared to FA (2.46 x, P<1e-6). Of all the outcome parameters evaluated (engraftment, rejection/graft failure, GvHD, TRM, OS), high F-araA AUC (>29.4 mum*h) was the only significant factor associated with the development of aGvHD by both univariate and multivariate analysis (P=0.02). The influence of plasma F-araA levels need to be evaluated in a larger cohort of patients to propose the need for therapeutic drug monitoring.Bone Marrow Transplantation advance online publication, 8 May 2017; doi:10.1038/bmt.2017.79.				
416.	Mohanan, E., Panetta, J. C., Lakshmi, K. M., Edison, E. S., Korula, A., Na, F., Abraham, A., Viswabandya, A., George, B., Mathews, V., Srivastava, A. and Balasubramanian, P. Pharmacokinetics and pharmacodynamics of Treosulfan in patients with thalassemia major undergoing allogeneic hematopoietic stem cell transplantation Clin Pharmacol Ther; 2017, **Address:Christian Medical College, Vellore,** India. St. Jude Children's Research Hospital, Memphis, USA. Treosulfan (Treo) based conditioning regimen prior to hematopoietic stem cell transplantation (HSCT) has been successfully used in treating hematological malignant and non-malignant diseases. We report Treo pharmacokinetics in patients with thalassemia major undergoing HSCT (n=87), receiving Treo at a dose of 14g/m(2) /day. Median Treo AUC and clearance (CL) was 1326mg*h/L and 10.8L/h/m(2) respectively. There was wide inter-individual variability in Treo AUC	**INT**	**JUL TO DEC**	**CENTRE FOR STEM CELL RESEARCH, HEMATOLOGY**	**PMID:**29247522 **Impact Factor:** 7.266 **H-Index:** 163

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	and CL (64 and 68%) which was not explained by any of the variables tested. None of the Treo PK parameters were significantly associated with graft rejection or toxicity; however, Treo CL <7.97 L/h/m(2) was significantly associated with poor overall [HR-2.7, CI (1.09-6.76), P=0.032] and event free survival [HR-2.4, CI (0.98-5.73), P=0.055). Further studies in a larger cohort are warranted to identify the factors explaining the variation in Treo PK as well as to establish a therapeutic range of Treo for targeted dose adjustment to improve HSCT outcome. This article is protected by copyright. All rights reserved.				
417.	Mohapatra, A., Kakde, S., Annapandian, V. M., Valson, A. T., Duhli, N., Korula, A., Matthai, S. M., Pulimood, A. B., David, V. G., Alexander, S., Jacob, S., Varughese, S., Gopal, B., Veerasamy, T. and John, G. T. Spectrum of biopsy proven renal disease in South Asian children: Two decades at a tropical tertiary care centre Nephrology (Carlton); 2017, **Address:** Department of Nephrology, **Christian Medical College and Hospital, Vellore**, India. Academic Research Department, Narayana Hrudayalaya Foundations, Bangalore, India. Department of Pathology, **Christian Medical College and Hospital, Vellore**, India. Central Electron Microscopy Unit, **Christian Medical College and Hospital, Vellore**, India. Department of Nephrology, Central Northern Adelaide Renal and Transplant Service, Adelaide, Australia. Department of Renal Medicine, Royal Brisbane and Women's Hospital, Queensland, Australia. AIM: We report findings from a large single centre paediatric renal biopsy cohort in South Asia. METHODS: We analyzed all renal biopsies performed on children aged </=18 years between 1996 and 2015 at our centre. The clinical characteristics and histological diagnosis pertaining to each case, distribution of renal diseases in children with various clinical presentations, and changes in the pattern of kidney disease during the study period were analyzed. RESULTS: A total of 1740 paediatric kidney biopsies were performed during the study period. The mean age was 12.8+/- 4.9 years (8 months to 18 years) and the male: female ratio was 1.5:1. The most common indication for renal biopsy was nephrotic syndrome (63.2%) followed by acute nephritic syndrome (13%). Minimal change disease was	**INT**	**JUL TO DEC**	**NEPHROLOGY, PATHOLOGY, CENTRAL ELECTRON MICROSCOPY UNIT, WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28846194 **Impact Factor:** 1.563 **H-Index:** 48

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	the most common cause of nephrotic syndrome while endocapillary proliferative glomerulonephritis (65.7% infection related), remained the commonest cause of acute nephritic syndrome. IgA nephropathy was the commonest cause of chronic kidney disease. Contrary to trends in European paediatric cohorts, the frequency of lupus nephritis increased over the two decades of the study, while that of endocapillary proliferative glomerulonephritis did not show any appreciable decline. CONCLUSIONS: This study provides the largest data on biopsy proven renal disease in children from South Asia published till date and highlights important differences in the spectrum and trends of kidney disease compared to data from other regions.				
418.	Molassiotis, A., Yates, P., Li, Q., So, W. K. W., Pongthavornkamol, K., Pittayapan, P., Komatsu, H., Thandar, M., Li, M. S., Titus Chacko, S., Lopez, V., Butcon, J., Wyld, D. and Chan, R. J. Mapping unmet supportive care needs, quality-of-life perceptions and current symptoms in cancer survivors across the Asia-Pacific region: results from the International STEP Study Ann Oncol; 2017, 28 (10): 2552-2558 **Address:** School of Nursing, Hong Kong Polytechnic University, Hong Kong. School of Nursing, Queensland University of Technology, Brisbane. Institute of Health and Biomedical Innovation, Queensland University of Technology, Brisbane. Cancer Nursing Professorial Precinct, Royal Brisbane and Women's Hospital, Brisbane, Australia. Wuxi School of Medicine, Jiangnan University, Wuxi, China. Nethersole School of Nursing, Chinese University of Hong Kong, Hong Kong. Faculty of Nursing. Nursing Department, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand. Faculty of Nursing and Medical Care, Keio University, Tokyo, Japan. University of Nursing, Yangon, Myanmar. College of Nursing, Seoul National University, Seoul, Republic of Korea. College of Nursing, **Christian Medical College, Vellore,** India. Alice Lee Centre for Nursing Studies, National University of Singapore, Singapore. College of Medicine, Bicol University, Philippines.	**INT**	**JUL TO DEC**	**COLLEGE OF NURSING**	**PMID:**28961835 **Impact Factor:** 11.855 **H-Index:** 190

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Cancer Care Services, Royal Brisbane and Women's Hospital, Brisbane. School of Medicine, University of Queensland, Brisbane, Australia. Background: To assess the supportive care needs, quality of life (QoL) and symptoms of patients with cancer after the end of first-line treatments and into survivorship in Asian countries using Australian data as benchmark. Patients and methods: A cross-sectional survey was carried out in Australia and eight high-income (HICs) and low-/middle-income (LMICs) Asian countries (China, Japan, Hong Kong SAR, South Korea, Myanmar, Thailand, India, Philippines) using validated scales (Cancer Survivors Unmet Needs scale), physical-symptom concerns (Cancer Survivors Survey of Needs subscale) and a single-item measure of global QoL perception. Results: Data were collected from 1748 patients from nine countries. QoL was highest in Australia and all other countries had significantly lower QoL than Australia (all P < 0.001). One-quarter of the patients reported low QoL (scores 1-3/10). The most frequently reported symptoms were fatigue (66.6%), loss of strength (61.8%), pain (61.6%), sleep disturbance (60.1%), and weight changes (57.7%), with no difference in symptom experience between Australian data and all other countries, or between HICs and LMICs. Unmet needs of moderate/strong level were particularly high in all aspects assessed, particularly in the area of existential survivorship (psychosocial care) and receiving comprehensive cancer care. Australia and HICs were similar in terms of unmet needs (all low), but LMICs had a significantly higher number of needs both compared with Australia and HICs (all P < 0.001). Conclusion: Health care systems in Asian countries need to re-think and prioritize survivorship cancer care and put action plans in place to overcome some of the challenges surrounding the delivery of optimal supportive cancer care, use available resource-stratified guidelines for supportive care and test efficient and cost-effective models of survivorship care.				
419.	Morch, K., Manoharan, A., Chandy, S., Chacko, N., Alvarez-Uria, G., Patil, S., Henry, A., Nesaraj, J., Kuriakose, C., Singh, A., Kurian, S., Gill Haanshuus, C., Langeland, N., Blomberg, B., Vasanthan Antony, G. and Mathai, D. Acute undifferentiated fever in India: a multicentre study of aetiology and diagnostic accuracy BMC Infect Dis; 2017, 17 (1): 665 **Address:** National Centre for Tropical Infectious Diseases, Department of Medicine, Haukeland University Hospital, Bergen, Norway. kristine.moerch@helse-	**INT**	**JUL TO DEC**	**INFECTIOUS DISEASES TRAINING AND RESEARCH CENTRE**	**PMID:**28978319 **PMCID:**5628453 **Impact Factor:** 2.768 **H-Index:** 74

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	bergen.no. Department of Clinical Science, University of Bergen, Bergen, Norway. kristine.moerch@helse-bergen.no. Infectious Diseases Training and Research Centre, Department of Medicine, **Christian Medical College, Vellore,** India. Duncan Hospital, Raxaul, Bihar, India. Rural Development Trust Hospital, Anantapur, Andhra Pradesh, India. B.K.L. Walawalkar Hospital, Ratnagiri, Maharashtra, India. Christian Hospital, Mungeli, Chhattisgarh, India. Bethesda Hospital, Ambur, Tamil Nadu, India. Christian Fellowship Hospital, Oddanchatram, Tamil Nadu, India. Baptist Christian Hospital, Tezpur, Assam, India. National Centre for Tropical Infectious Diseases, Department of Medicine, Haukeland University Hospital, Bergen, Norway. Department of Clinical Science, University of Bergen, Bergen, Norway. BACKGROUND: The objectives of this study were to determine the proportion of malaria, bacteraemia, scrub typhus, leptospirosis, chikungunya and dengue among hospitalized patients with acute undifferentiated fever in India, and to describe the performance of standard diagnostic methods. METHODS: During April 2011-November 2012, 1564 patients aged >/=5 years with febrile illness for 2-14 days were consecutively included in an observational study at seven community hospitals in six states in India. Malaria microscopy, blood culture, Dengue rapid NS1 antigen and IgM Combo test, Leptospira IgM ELISA, Scrub typhus IgM ELISA and Chikungunya IgM ELISA were routinely performed at the hospitals. Second line testing, Dengue IgM capture ELISA (MAC-ELISA), Scrub typhus immunofluorescence (IFA), Leptospira Microscopic Agglutination Test (MAT), malaria PCR and malaria immunochromatographic rapid diagnostic test (RDT) Parahit Total were performed at the coordinating centre. Convalescence samples were not available. Case definitions were as follows: Leptospirosis: Positive ELISA and positive MAT. Scrub typhus: Positive ELISA and positive IFA. Dengue: Positive RDT and/or positive MAC-ELISA. Chikungunya: Positive ELISA. Bacteraemia: Growth in blood culture excluding those defined as contaminants. Malaria: Positive genus-specific PCR. RESULTS: Malaria was diagnosed in 17% (268/1564) and among these 54% had P. falciparum. Dengue was diagnosed in 16% (244/1564). Bacteraemia was found in 8% (124/1564), and among these Salmonella typhi or S. paratyphi constituted 35%. Scrub typhus was diagnosed in 10%, leptospirosis in				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	7% and chikungunya in 6%. Fulfilling more than one case definition was common, most frequent in chikungunya where 26% (25/98) also had positive dengue test. CONCLUSIONS: Malaria and dengue were the most common causes of fever in this study. A high overlap between case definitions probably reflects high prevalence of prior infections, cross reactivity and subclinical infections, rather than high prevalence of coinfections. Low accuracy of routine diagnostic tests should be taken into consideration when approaching the patient with acute undifferentiated fever in India.				
420.	Mukherjee, P. S., Vishnubhatla, S., Amarapurkar, D. N., Das, K., Sood, A., Chawla, Y. K., Eapen, C. E., Boddu, P., Thomas, V., Varshney, S., Hidangmayum, D. S., Bhaumik, P., Thakur, B., Acharya, S. K. and Chowdhury, A. Etiology and mode of presentation of chronic liver diseases in India: A multi centric study PLoS One; 2017, 12 (10): e0187033 **Address:** Liver Foundation, West Bengal. Kolkata, West Bengal, India. Department of Biostatistics, All India Institute of Medical Sciences, Ansari Nagar, New Delhi, India. Bombay Hospital & Medical Research Centre, Mumbai, India. Department of Hepatology, School of Digestive and liver Diseases, Institute of Post Graduate Medical Education & Research, Kolkata, India. Department of Gastroenterology, Dayanand Medical College & Hospital, Ludhiana, Punjab, India. Department of Hepatology, Post Graduate Institute of Medical Sciences, Chandigarh, India. Department of Hepatology, **Christian Medical College, Vellore,** India. Department of Gastroenterology, Osmania General Hospital, Afzalgunj, Hyderabad, Telangana, India. Department of Gastroenterology, Calicut Medical College, Kozhikode, Kerala, India. Department of Surgical Gastroenterology, Bhopal Memorial Hospital and Research Centre, Bhopal, Madhya Pradesh, India. Catholic medical centre hospital, Koirengei, Imphal East, Manipur, India. Department of medicine, Agartala Govt Medical College, Agartala, Tripura, India. Department of Gastroenterology and Human Nutrition, All India Institute of Medical Sciences, Ansari Nagar, New Delhi, India. Indian Institute of Liver and Digestive Sciences, Sitala (East), Jagadishpur,	**INT**	**JUL TO DEC**	**HEPATOLOGY**	**PMID:**29073197 **PMCID:**5658106 **Impact Factor:** 2.806 **H-Index:** 218

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Sonarpur, 24 Pgs(S), Kolkata, India. There is a paucity of health policy relevant data for chronic liver disease from India, impeding formulation of an interventional strategy to address the issue. A prospective, multicentric study to delineate the etiology and clinical profile of chronic liver disease in India is reported here. A centrally coordinated and monitored web-based data repository was developed (Feb, 2010 to Jan, 2013) and analyzed. Eleven hospitals from different parts of India participated. Data were uploaded into a web based proforma and monitored by a single centre according to a standardized protocol. 1.28% (n = 266621) of all patients (n = 20701383) attending the eleven participating hospitals of India had liver disease. 65807 (24.68%) were diagnosed for the first time (new cases). Of these, 13014 (19.77%, median age 43 years, 73% males) cases of chronic liver disease were finally analyzed. 33.9% presented with decompensated cirrhosis. Alcoholism (34.3% of 4413) was the commonest cause of cirrhosis while Hepatitis B (33.3%) was predominant cause of chronic liver disease in general and non-cirrhotic chronic liver disease (40.8% out of 8163). There was significant interregional differences (hepatitis C in North, hepatitis B in East and South, alcohol in North-east, Non-alcoholic Fatty Liver Disease in West) in the predominant cause of chronic liver disease. Hepatitis B (46.8% of 438 cases) was the commonest cause of hepatocellular Cancer.11.7% had diabetes. Observations of our study will help guide a contextually relevant liver care policy for India and could serve as a framework for similar endeavor in other developing countries as well.				
421.	Muliyil DE(1), Vellaiputhiyavan K(1), Alex R(2), Mohan VR(1). Compliance to treatment among type 2 diabetics receiving care at peripheral mobile clinics in a rural block of Vellore District, Southern India. J Family Med Prim Care. 2017 Apr-Jun;6(2):330-335. doi: 10.4103/2249-4863.219991. **Author information:** (1)Department of Community Health, **Christian Medical College, Vellore,** Tamil Nadu, India. (2)Department of Accident and Emergency, **Christian Medical College, Vellore,** Tamil Nadu, India. Background: Providing treatment to patients with diabetes mellitus in rural areas at a cost they can afford is a public health challenge. Aims: This study aims to	**NAT**	**JAN TO JUN**	**COMMUNITY HEALTH, ACCIDENT AND EMERGENCY**	**PMID:**29302542 **PMCID:PMC**5749081 **Impact Factor:** 0.670 **H-Index:** NA

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	measure the rate of compliance to oral hypoglycemic agents among patients with type 2 diabetes mellitus attending peripheral mobile clinics in rural South India. To study factors that impact glycemic control. Setting and Design: A cross-sectional study was done among patients attending peripheral mobile clinics in a rural block in Southern India. Materials and Methods: Pill counts were done to assess compliance. Participants' dietary intake was measured using a 24 h diet recall and their level of physical activity was measured using the WHO Global Physical Activity Questionnaire. Glycated hemoglobin (HbA1c) was measured for all participants. Statistical Analyses Used: Data were entered on EpiData and analyzed using SPSS. The prevalence of good glycemic control and good compliance was measured. A multiple linear regression was done to study factors affecting glycemic control. Results: Overall 52% of the participants were compliant to at least one drug and 50% had achieved good glycemic control. Compliance increased by 2.1% with every passing year since the diagnosis of diabetes. HbA1c reduced by 0.09% for every 10% increase in overall compliance. Conclusions: Levels of compliance and glycemic control achieved through this primary care team is comparable to those achieved through other systems. DOI: 10.4103/2249-4863.219991 Conflict of interest statement: There are no conflicts of interest.				
422.	Muniswami, D. M., Kanakasabapathy, I. and Tharion, G. Globose basal cells for spinal cord regeneration Neural Regen Res; 2017, 12 (11): 1895-1904 **Address:** Department of Physical Medicine & Rehabilitation, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Anatomy, **Christian Medical College, Vellore,** Tamil Nadu, India. Spinal cord injury (SCI) is a devastating condition with loss of motor and sensory functions below the injury level. Cell based therapies are experimented in pre-clinical studies around the world. Neural stem cells are located intra-cranially in subventricular zone and hippocampus which are highly invasive sources. The olfactory epithelium is a neurogenic tissue where neurogenesis takes place throughout the adult life by a population of stem/progenitor cells. Easily accessible olfactory neuroepithelial stem/progenitor cells are an attractive cell source for transplantation in SCI. Globose basal cells (GBCs) were isolated from rat olfactory epithelium, characterized by flow cytometry and immunohistochemically. These cells were further studied for neurosphere formation and neuronal induction. T10 laminectomy was done to create drop-weight SCI in rats. On the 9(th) day	**INT**	**JUL TO DEC**	**PHYSICAL MEDICINE & REHABILITATION, ANATOMY**	**PMID:**29239337 **PMCID:**5745845 **Impact Factor:** 1.769 **H-Index:** 15

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	following SCI, 5 x 10(5) cells were transplanted into injured rat spinal cord. The outcome of transplantation was assessed by the Basso, Beattie and Bresnahan (BBB) locomotor rating scale, motor evoked potential and histological observation. GBCs expressed neural stem cell markers nestin, SOX2, NCAM and also mesenchymal stem cell markers (CD29, CD54, CD90, CD73, CD105). These cells formed neurosphere, a culture characteristics of NSCs and on induction, differentiated cells expressed neuronal markers betaIII tubulin, microtubule-associated protein 2, neuronal nuclei, and neurofilament. GBCs transplanted rats exhibited hindlimb motor recovery as confirmed by BBB score and gastrocnemius muscle electromyography amplitude was increased compared to controls. Green fluorescent protein labelled GBCs survived around the injury epicenter and differentiated into betaIII tubulin-immunoreactive neuron-like cells. GBCs could be an alternative to NSCs from an accessible source for autologous neurotransplantation after SCI without ethical issues.				
423.	Muralidharan, V., Nair, B. R., Patel, B. and Rajshekhar, V. Primary Intradural Extramedullary Cervical Spinal Cysticercosis World Neurosurg; 2017, 106 1052 e5-1052 e11 **Address:** Department of Neurological Sciences, **Christian Medical College, Vellore,** India. Department of Pathology, **Christian Medical College, Vellore,** India. Department of Neurological Sciences, **Christian Medical College, Vellore,** India. Electronic address: rajshekhar@cmcvellore.ac.in. BACKGROUND: Spinal cysticercosis has been reported in 0.7%-3.0% of patients with neurocysticercosis. Most patients with spinal cysticercosis have a coexisting intracranial disease. Most often this intracranial disease manifests as intradural extramedullary lesions involving thoracic and lumbar regions or intramedullary lesions. Intradural extramedullary primary spinal cysticercosis manifesting as cervical myelopathy is extremely rare and has not been reported to date. CASE DESCRIPTION: A 56-year-old man from the northeastern part of India presented with progressive spastic quadriparesis. Magnetic resonance imaging showed a ventrally located intradural extramedullary multiloculated cyst with an enhancing wall in the upper cervical region. Enzyme-linked immunoelectrotransfer blot performed to detect cysticercal antibodies in serum was positive. The patient underwent total excision of the cysts, which were confirmed histologically to be	**INT**	**JUL TO DEC**	**NEUROLOGICAL SCIENCES, PATHOLOGY**	**PMID:**28711534 **Impact Factor:** 2.592 **H-Index:** 78

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	cysticercal cysts. He was also treated with 2 weeks of albendazole therapy after surgery. He had recovered fully 1 year later. CONCLUSIONS: Cysticercosis should be considered in the differential diagnosis in a patient with multiloculated cysts in the spinal subarachnoid space. Surgical exploration and excision of the cysts should be performed not only to establish a diagnosis but also to decompress the cord before medical therapy.				
424.	Murugesan, M., Ganesan, S. K. and Ajjampur, S. S. Cryptosporidiosis in children in the Indian subcontinent Trop Parasitol; 2017, 7 (1): 18-28 **Address:** Division of Gastrointestinal Sciences, Wellcome Trust Research Laboratory, **Christian Medical College, Vellore,** Tamil Nadu, India. Cryptosporidiosis is a leading cause of diarrheal disease among children under two in developing countries. Previous estimates have shown a high burden of cryptosporidial diarrhea in children from Sub-Saharan Africa and South Asia. Asymptomatic cryptosporidial infections which go undetected and untreated have been shown to result in significant malnutrition. In this review, we carried out a literature search of studies published on cryptosporidiosis in children in the Indian subcontinent from 1983 to 2016. Of the 154 publications identified, 54 were included for final analysis with both hospital-based and community-based studies. There were wide variations in reported prevalence rates from hospital studies and highlight the need to be carry out these studies with uniform sampling and molecular tools for detection, especially in countries with a dearth of information. Community-based studies, however, showed similarities in spite of differences in when (the late 1990s up until recently) and where (South India or Bangladesh) they were conducted. When more sensitive detection methods were used, cryptosporidial diarrhea accounted for 7%-9% of all diarrhea episodes and 20%-30% of children in these cohorts experienced at least one cryptosporidial diarrheal episode. High rates of asymptomatic infections with increased detection by serology and multiple infections (symptomatic and asymptomatic) were also documented in all cohorts. This overview brings to light the high burden of disease associated with cryptosporidiosis in children in the subcontinent and the gaps in knowledge to be addressed.	**INT**	**JAN TO JUN**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28459011 **Impact Factor:** NA **H-Index:** NA

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
425.	Mustafa Al Balushi,[1,*] Ajoy Mathew Varghese,[2] Faisal Al Azri,[3] and Rashid Al Abri[2] It is always darkest before dawn Oman Med J. 2017 Sep;32(5):440-441. DOI: 10.5001/omj.2017.83	**INT**	**JUL-DEC**	**ENT II**	**PMID:** 29026479 **PMCID:** **PMC**5632689
426.	Muthuirulandi Sethuvel, D. P., Devanga Ragupathi, N. K., Anandan, S. and Veeraraghavan, B. Update on: Shigella new serogroups/serotypes and their antimicrobial resistance Lett Appl Microbiol; 2017, 64 (1): 8-18 **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore,** India. Shigellosis represents a major burden of disease in developing countries. A low infectious dose allows the disease to be spread effectively. Although shigellosis is mostly a self-limiting disease, antibiotics are recommended to reduce deaths, disease symptoms and organism-shedding time. However, in India, antimicrobial resistance among the genus Shigella is more common than among any other enteric bacteria. Notably, new serotypes or subserotypes in Shigella are reported from various parts of the world. Identification of new subserotypes of Shigella spp. is becoming a major issue as these strains are nontypeable by conventional serotyping. The commercially available antisera may not cover all possible epitopes of the O lipopolysaccharide antigen of Shigella serotypes. Therefore, molecular methods which most closely approach the resolution of full serotyping are necessary to identify such strains. In addition, the knowledge of a prevalent serotype in various geographic regions may assist in formulating strategies such as the development of a vaccine to prevent infection especially when the immunity to disease is serotype specific, and to understand the disease burden caused by new Shigella serotypes.	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY**	**PMID:**27783408 **Impact Factor:** 1.575 **H-Index:** 87
427.	Muthuirulandi Sethuvel, D. P., Devanga Ragupathi, N. K., Anandan, S., Walia, K. and Veeraraghavan, B. Molecular diagnosis of non-serotypeable Shigella spp.: Problems and Prospects Journal of Medical Microbiology; 2017, 66 (2): 255-257	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY**	**PMID:**28113042 **Impact Factor:** 2.159 **H-Index:** 96

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: 1Research Associate **Christian Medical College, Vellore**. 2Senior Research Officer **Christian Medical College, Vellore**. 3Associate Professor **Christian Medical College, Vellore**. 4Professor Indian Council of Medical Research. 5**Christian Medical College and Hospital** Vellore 632 004, INDIA.				
428.	Muthuirulandi Sethuvel, D. P., Devanga Ragupathi, N. K., Anandan, S., Verghese, V. P. and Veeraraghavan, B. First report on whole-genome shotgun sequences of 23 biochemically indistinguishable clinical Shigella isolates J Glob Antimicrob Resist; 2017, 9 32-33 **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore** 632 004, India. Department of Child Health, **Christian Medical College, Vellore** 632 004, India. Department of Clinical Microbiology, **Christian Medical College, Vellore** 632 004, India. Electronic **Address:** vbalaji@cmcvellore.ac.in Shigella spp. are a major diarrhoeal disease pathogen worldwide and can cause considerable morbidity and mortality. Notably, limited genome data are available for serogroups/sub-serogroups of Shigella. Here we report the whole-genome shotgun sequences of 23 non-typeable Shigella from stool specimens that biochemically resembled Shigella spp. but were non-typeable with Shigella-specific antisera.	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY, CHILD HEALTH**	**PMID:**28219825 **Impact Factor:** 1.276 **H-Index:** 8
429.	Muthuirulandi Sethuvel, D. P., Devanga Ragupathi, N. K., Anandan, S., Walia, K. and Veeraraghavan, B. Molecular diagnosis of non-serotypeable Shigella spp.: problems and prospects J Med Microbiol; 2017, 66 (2): 255-257 **Address:** 1Department of Clinical Microbiology, **Christian Medical College, Vellore** 632 004, India. 2Division of Epidemiology and Communicable Diseases, Indian Council of Medical Research, New Delhi 110 029, India. It is not always possible to identify Shigella serogroups/serotypes by biochemical properties alone. Specific identification requires serotyping. Occasionally, isolates	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY**	**PMID:**28266285 **Impact Factor:**2.159 **H-Index:** 96

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	that resemble Shigella spp. biochemically, but are non-agglutinable with available antisera, have been observed. Several mechanisms have been reported to limit the efficiency of the serotyping assay. Serotype conversion is a major mechanism in Shigella spp. to escape protective host immune responses. This easy conversion through significant modification of the O-antigen backbone results in different serotypes, which makes laboratory identification difficult. Furthermore, members of the family Enterobacteriaceae are closely related and there is antigenic cross-over (intra- and inter-specific cross-reaction) which affects the agglutination reaction. The performance of the available methods for identification of non-serotypeable Shigella is discussed here, and reveals them to be non-reliable. This shows a need for an alternative method for identification and typing of Shigella spp.				
430.	N Gupta1, A Bhatnagar2 Poster Presentations- Infection-related rheumatic diseases: SAT0577 Musculoskeletal manifestations of tuberculosis: an observational study Annals of the Rheumatic Diseases; 2017, 76 994-994 **Author affiliations** Clinical Immunology & Rheumatology, **Christian Medical College, Vellore** Pulmonology, Rajan Babu Tuberculosis Hospital, Delhi, India Abstract: Background Data of musculoskeletal manifestations of tuberculosis is limited to case reports, series or retrospective study. To our knowledge there is no prospective study which has addressed this issue. So, we conducted this study to create awareness among the doctors about musculoskeletal manifestations of tuberculosis. Objectives To study the musculoskeletal manifestations of tuberculosis. Methods It was a prospective observational study which was conducted at a referral Tuberculosis Hospital in North India in the month of September & October 2016. Patients from outpatient and inpatient department of pulmonology were recruited irrespective of the duration of anti tubercular therapy. We included patients who had active tuberculosis as per World Health Organization (WHO) 2010 criteria. Patients with other chronic illnesses were excluded. A detailed history, examination and appropriate investigations (blood, urine, serological and radiological) of the 100 consecutive patients fulfilling the inclusion criteria was recorded Results Mean age of patients was 32.16±12.93 years. Male to female ratio was 43:57. Mean duration of disease was 6.85±8.83 months. Of the 100 patients, 60 (60%) had pulmonary tuberculosis. Pleural tuberculosis presenting as pleural effusion was seen in 17 (17%) patients. Abdominal tuberculosis was seen in	**INT**	**JUL TO DEC**	**CLINICAL IMMUNOLOGY & RHEUMATOLOGY**	**NO PMID** **WOS:**000413181403041 **Impact Factor:** 12.811 **H-Index:** 189

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	9 (9%), tuberculous lymphadenopathy in 8 (8%) and pott's spine in 4 (7%). Eye tuberculosis and tubercular breast lump was seen in 1 patient each. 83 (83%) patients had first episode of tuberculosis while the other 17 (17%) patients had second episode of tuberculosis. 74 (74%) patients were on category 1 anti tuberculosis treatment (ATT), while 23 (23%) were on category 2 ATT and 3 (3%) were on modified ATT. Mean duration of ATT was 1.79±1.34 months. Fibromyalgia was classified in 21 (21%) patients, polyarthralgia's were seen in 9 (9%), pott's spine in 7 (7%), osteomyelitis in 4 (4%) and scleritis in 2 (2%) patients. Uveitis, tenosynovitis, erythema induratum, subcutaneous abscess and dactylitis was seen in 1 (1%) each. Rheumatological manifestations as septic arthritis, DILE, poncet's arthritis, tendinopathy, amyloidosis, gout, erythema nodosum and myositis were not seen in any patient. In 21 patients who had fibromyalgia, 11 patients developed fibromyalgia with 2nd episode of tuberculosis amounting to 60.75% patients. Conclusions This is the first prospective study to look at the musculoskeletal manifestations of tuberculosis. Patients with active tuberculosis were found to have various rheumatological manifestations. Acknowledgements I acknowledge Dr Sushil Gupta, director of the Rajan Babu TB Hspital for allowing me to conduct this study. Disclosure of Interest None declared. http://dx.doi.org/10.1136/annrheumdis-2017-eular.1357				
431.	Naal, F. D., Muller, A., Varghese, V. D., Wellauer, V., Impellizzeri, F. M. and Leunig, M. Outcome of Hip Impingement Surgery: Does Generalized Joint Hypermobility Matter? Am J Sports Med; 2017, 45 (6): 1309-1314 **Address:** Technical University of Munich, Munich, Germany. Department of Orthopaedic Surgery, Schulthess Clinic, Zurich, Switzerland. Department of Orthopaedic Surgery, **Christian Medical Center, Vellore, India.** Department of Research and Development, Schulthess Clinic, Zurich, Switzerland. **BACKGROUND:** Generalized joint hypermobility (JH) might negatively influence the results of surgical femoroacetabular impingement (FAI) treatment, as JH has been linked to musculoskeletal pain and injury incidence in athletes. JH may also be associated with worse outcomes of FAI surgery in thin females. **PURPOSE:** To (1) determine the results of FAI surgery at a minimum 2-year follow-up by means	**INT**	**JAN TO JUN**	**ORTHOPAEDIC SURGERY**	**PMID:**28141941 **Impact Factor:** 5.673 **H-Index:** 176

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	of patient-reported outcome measures (PROMs) and failure rates, (2) assess the prevalence of JH in FAI patients and its effect on outcomes, and (3) identify other risk factors associated with treatment failure. STUDY DESIGN: Cohort study; Level of evidence, 3. **METHODS:** We included 232 consecutive patients (118 females; mean age, 36 years) with 244 hips surgically treated for symptomatic FAI between 2010 and 2012. All patients completed different PROMs preoperatively and at a mean follow-up of 3.7 years. Satisfaction questions were used to define subjective failure (answering any of the 2 subjective questions with dissatisfied/ very dissatisfied and/or didn't help/ made things worse). Conversion to total hip replacement (THR) was defined as objective failure. JH was assessed using the Beighton score. **RESULTS:** All PROM values significantly (P< .001) improved from preoperative measurement to follow-up (Oxford Hip Score: 33.8 to 42.4; University of California at Los Angeles Activity Scale: 6.3 to 7.3; EuroQol-5 Dimension Index: 0.58 to 0.80). Overall, 34% of patients scored >/=4 on the Beighton score, and 18% scored >/=6, indicating generalized JH. Eleven hips (4.7%) objectively failed and were converted to THR. Twenty-four patients (10.3%) were considered as subjective failures. No predictive risk factors were identified for subjective failure. Tonnis grade significantly (P< .001) predicted objective failure (odds ratio, 13; 95% CI, 4-45). There was a weak inverse association (r = -0.16 to -0.30) between Beighton scores and preoperative PROM values. There were no significant associations between Beighton scores and postoperative PROM values or subjective failure rates, but patients who objectively failed had lower Beighton scores than did nonfailures (1.6 vs 2.6; P = .049). **CONCLUSION:** FAI surgery yielded favorable outcomes at short- to midterm follow-up. JH as assessed by the Beighton score was not consistently associated with subjective and objective results. Joint degeneration was the most important risk factor for conversion to THR. Although statistical significance was not reached, female patients with no joint degeneration, only mild FAI deformity, and higher Oxford scores at the time of surgery seemed to be at increased risk for subjective dissatisfaction.				
432.	Nabarro, L. E. B., Shankar, C., Pragasam, A. K., Mathew, G., Jeyaseelan, V., Veeraraghavan, B. and Verghese, V. P. Clinical and Bacterial Risk Factors for Mortality in Children With Carbapenem-resistant Enterobacteriaceae Bloodstream Infections in India	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY, BIOSTATISTICS, PEDIATRICS**	**PMID:**28005691 **Impact Factor:** 2.486 **H-Index:** 127

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Pediatr Infect Dis J; 2017, 36 (6): e161-e166 **Address:** From the *Department of Microbiology, **Christian Medical College, Vellore,** Tamil Nadu, India; daggerPublic Health England, London, United Kingdom; double daggerDepartment of Biostatistics, and section signDepartment of Pediatrics, **Christian Medical College, Vellore,** Tamil Nadu, India. **BACKGROUND:** Carbapenem-resistant Enterobacteriaceae (CRE) are an increasing cause of nosocomial infection in hospitalized children worldwide. Few studies have investigated risk factors for mortality in children with CRE bloodstream infection (BSI). Data are particularly scarce in areas where NDM and OXA carbapenemases predominate. Here, we investigate mortality rates, clinical and microbiologic risk factors for mortality in 50 pediatric patients with CRE BSI in India. **METHODS:** Children younger than 17 years old with meropenem-resistant Klebsiella pneumoniae or Escherichia coli isolated from blood culture in 2014 and 2015 were identified from laboratory records. Clinical records were systematically reviewed for each child to establish mortality at 30 days and clinical details. Bacterial isolates were subjected to meropenem E test and multiplex polymerase chain reaction to determine carbapenemase gene. Data were analyzed to establish clinical and bacterial risk factors for mortality. **RESULTS:** All CRE BSI were hospital-acquired or associated with healthcare. A total of 84% of children had an underlying comorbidity and 46% had a malignancy. K. pneumoniae was the most common bacteria isolated; NDM was the most common carbapenemase gene detected. The mortality rate was 52%. Significant risk factors for mortality included intensive care admission, intubation, inotropic support and respiratory source. Failure to clear bacteremia and a minimum inhibitory concentration > 8 mg/L for the isolate was associated with a statistically significant increase in mortality. Mortality rates were significantly lower when two or more effective drugs were used in combination. **CONCLUSIONS:** CRE BSI affects children with multiple comorbidities and repeated admissions to hospital. The mortality rate is high; combination therapy may be beneficial.				
433.	Naghavi, Mohsen, Abajobir, Amanuel Alemu, Abbafati, Cristiana, Abbas, Kaja M., Abd-Allah, Foad, Abera, Semaw Ferede, Aboyans, Victor, Adetokunboh, Olatunji, Arnlov, Johan, Afshin, Ashkan, Agrawal, Anurag, Kiadaliri, Aliasghar Ahmad, Ahmadi, Alireza, Ahmed, Muktar Beshir, Aichour, Amani Nidhal, Aichour, Ibtihel, Aichour, Miloud Taki Eddine, Aiyar, Sneha, Al-Eyadhy, Ayman, Alahdab, Fares, Al-Aly, Ziyad, Alam, Khurshid, Alam, Noore, Alam, Tahiya, Alene, Kefyalew Addis, Ali,	**INT**	**JUL TO DEC**	**PULMONARY MEDICINE**	**PMID:**28919116; **PMCID:PMC**5605883. **PMID:WOS:**000410630000003 **Impact Factor:**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Syed Danish, Alizadeh-Navaei, Reza, Alkaabi, Juma M., Alkerwi, Ala'a, Alla, Francois, Allebeck, Peter, Allen, Christine, Al-Raddadi, Rajaa, Alsharif, Ubai, Altirkawi, Khalid A., Alvis-Guzman, Nelson, Amare, Azmeraw T., Amini, Erfan, Ammar, Walid, Amoako, Yaw Ampem, Anber, Nahla, Andersen, Hjalte H., Andrei, Catalina Liliana, Androudi, Sofia, Ansari, Hossein, Antonio, Carl Abelardo T., Anwari, Palwasha, Arora, Megha, Artaman, Al, Aryal, Krishna Kumar, Asayesh, Hamid, Asgedom, Solomon W., Atey, Tesfay Mehari, Avila-Burgos, Leticia, Avokpaho, Euripide Frinel G. Arthur, Awasthi, Ashish, Paulina, Beatriz, Quintanilla, Ayala, Bejot, Yannick, Babalola, Tesleem Kayode, Bacha, Umar, Balakrishnan, Kalpana, Barac, Aleksandra, Barboza, Miguel A., Barker-Collo, Suzanne L., Barquera, Simon, Barregard, Lars, Barrero, Lope H., Baune, Bernhard T., Bedi, Neeraj, Beghi, Ettore, Bekele, Bayu Begashaw, Bell, Michelle L., Bennett, James R., Bensenor, Isabela M., Berhane, Adugnaw, Bernabe, Eduardo, Betsu, Balem Demtsu, Beuran, Mircea, Bhatt, Samir, Biadgilign, Sibhatu, Bienhoff, Kelly, Bikbov, Boris, Bisanzio, Donal, Bourne, Rupert R. A., Breitborde, Nicholas J. K., Negesa, Lemma, Bulto, Bulto, Bumgarner, Blair R., Butt, Zahid A., Cardenas, Rosario, Cahuana-Hurtado, Lucero, Cameron, Ewan, Cesar Campuzano, Julio, Car, Josip, Jesus Carrero, Juan, Carter, Austin, Casey, Daniel C., Castaneda-Orjuela, Carlos A., Catala-Lopez, Ferran, Charlson, Fiona J., Chibueze, Chioma Ezinne, Chimed-Ochir, Odgerel, Chisumpa, Vesper Hichilombwe, Chitheer, Abdulaal A., **Christopher, Devasahayam Jesudas**, Ciobanu, Liliana G., Cirillo, Massimo, Cohen, Aaron J., Colombara, Danny, Cooper, Cyrus, Cowie, Benjamin C., Criqui, Michael H., Dandona, Lalit, Dandona, Rakhi, Dargan, Paul I., Das Neves, Jose, Davitoiu, Dragos V., Davletov, Kairat, De Courten, Barbora, Degenhardt, Louisa, Deiparine, Selina, Deribe, Kebede, Deribew, Amare, Dey, Subhojit, Dicker, Daniel, Ding, Eric L., Djalalinia, Shirin, Huyen Phuc, Do, Doku, David Teye, Douwes-Schultz, Dirk, Driscoll, Tim R., Dubey, Manisha, Duncan, Bruce Bartholow, Echko, Michelle, El-Khatib, Ziad Ziad, Ellingsen, Christian Lycke, Enayati, Ahmadali, Erskine, Holly E., Eskandarieh, Sharareh, Esteghamati, Alireza, Ermakov, Sergey P., Estep, Kara, E Sa Farinha, Carla Sofia, Faro, Andre, Farzadfar, Farshad, Feigin, Valery L., Fereshtehnejad, Seyed-Mohammad, Fernandes, Joao C., Ferrari, Alize J., Feyissa, Tesfaye Regassa, Filip, Irina, Finegold, Samuel, Fischer, Florian, Fitzmaurice, Christina, Flaxman, Abraham D., Foigt, Nataliya, Frank, Tahvi, Fraser, Maya, Fullman, Nancy, Furst, Thomas, Furtado, Joao M., Gakidou, Emmanuela, Garcia-Basteiro, Alberto L., Gebre, Teshome, Gebregergs, Gebremedhin Berhe, Gebrehiwot, Tsegaye Tewelde, Gebremichael, Delelegn Yilma, Geleijnse, Johanna M., Genova-Maleras, Ricard, Gesesew, Hailay Abrha, Gething, Peter W., Gillum,				47.831 **H-Index:** 646

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Richard F., Ginawi, Ibrahim Abdelmageem Mohamed, Giref, Ababi Zergaw, Giroud, Maurice, Giussani, Giorgia, Godwin, William W., Gold, Audra L., Goldberg, Ellen M., Gona, Philimon N., Gopalani, Sameer Vali, Gouda, Hebe N., Goulart, Alessandra Carvalho, Griswold, Max, Gupta, Prakash C., Gupta, Rajeev, Gupta, Tanush, Gupta, Vipin, Haagsma, Juanita A., Hafezi-Nejad, Nima, Hailu, Alemayehu Desalegne, Hailu, Gessessew Bugssa, Hamadeh, Randah Ribhi, Hambisa, Mitiku Teshome, Hamidi, Samer, Hammami, Mouhanad, Hancock, Jamie, Handal, Alexis J., Hankey, Graeme J., Hao, Yuantao, Harb, Hilda L., Hareri, Habtamu Abera, Hassanvand, Mohammad Sadegh, Havmoeller, Rasmus, Hay, Simon I., He, Fei, Hedayati, Mohammad T., Henry, Nathaniel J., Beatriz Heredia-Pi, Ileana, Herteliu, Claudiu, Hoek, Hans W., Horino, Masako, Horita, Nobuyuki, Hosgood, H. Dean, Hostiuc, Sorin, Hotez, Peter J., Hoy, Damian G., Huynh, Chantal, Iburg, Kim Moesgaard, Ikeda, Chad, Ileanu, Bogdan Vasile, Irenso, Asnake Ararsa, Irvine, Caleb Mackay Salpeter, Jurisson, Mikk, Jacobsen, Kathryn H., Jahanmehr, Nader, Jakovljevic, Mihajlo B., Javanbakht, Mehdi, Jayaraman, Sudha P., Jeemon, Panniyammakal, Jha, Vivekanand, John, Denny, Johnson, Catherine O., Johnson, Sarah Charlotte, Jonas, Jost B., Kabir, Zubair, Kadel, Rajendra, Kahsay, Amaha, Kamal, Ritul, Karch, Andre, Karimi, Seyed M., Karimkhani, Chante, Kasaeian, Amir, Kassaw, Nigussie Assefa, Kassebaum, Nicholas J., Katikireddi, Srinivasa Vittal, Kawakami, Norito, Keiyoro, Peter Njenga, Kemmer, Laura, Kesavachandran, Chandrasekharan Nair, Khader, Yousef Saleh, Khan, Ejaz Ahmad, Khang, Young-Ho, Khoja, Abdullah Tawfih Abdullah, Khosravi, Ardeshir, Khosravi, Mohammad Hossein, Khubchandani, Jagdish, Kieling, Christian, Kievlan, Daniel, Kim, Daniel, Kim, Yun Jin, Kimokoti, Ruth W., Kinfu, Yohannes, Kissoon, Niranjan, Kivimaki, Mika, Knudsen, Ann Kristin, Kopec, Jacek A., Kosen, Soewarta, Koul, Parvaiz A., Koyanagi, Ai, Defo, Barthelemy Kuate, Kulikoff, Xie Rachel, Kumar, G. Anil, Kumar, Pushpendra, Kutz, Michael, Kyu, Hmwe H., Lal, Dharmesh Kumar, Lalloo, Ratilal, Lallukka, Tea, Lambert, Nkurunziza, Lan, Qing, Lansingh, Van C., Larsson, Anders, Lee, Paul H., Leigh, James, Leung, Janni, Levi, Miriam, Li, Yongmei, Kappe, Darya Li, Liang, Xiaofeng, Liben, Misgan Legesse, Lim, Stephen S., Liu, Angela, Liu, Patrick Y., Liu, Yang, Lodha, Rakesh, Logroscino, Giancarlo, Lorkowski, Stefan, Lotufo, Paulo A., Lozano, Rafael, Lucas, Timothy C. D., Ma, Stefan, Macarayan, Erlyn Rachelle King, Maddison, Emilie R., Abd El Razek, Mohammed Magdy, Majdan, Marek, Majdzadeh, Reza, Majeed, Azeem, Malekzadeh, Reza, Malhotra, Rajesh, Malta, Deborah Carvalho, Manguerra, Helena, Manyazewal, Tsegahun, Mapoma, Chabila C., Marczak, Laurie B., Markos, Desalegn, Martinez-Raga, Jose, Martins-Melo, Francisco Rogerlandio, Martopullo, Ira, Mcalinden, Colm, Mcgaughey, Madeline,				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Mcgrath, John J., Mehata, Suresh, Meier, Toni, Meles, Kidanu Gebremariam, Memiah, Peter, Memish, Ziad A., Mengesha, Melkamu Merid, Mengistu, Desalegn Tadese, Menota, Bereket Gebremichael, Mensah, George A., Meretoja, Atte, Meretoja, Tuomo J., Millear, Anoushka, Miller, Ted R., Minnig, Shawn, Mirarefin, Mojde, Mirrakhimov, Erkin M., Misganaw, Awoke, Mishra, Shiva Raj, Mohammad, Karzan Abdulmuhsin, Mohammadi, Alireza, Mohammed, Shafiu, Mokdad, Ali H., Mola, Glen Liddell D., Mollenkopf, Sarah K., Molokhia, Mariam, Monasta, Lorenzo, Montanez Hernandez, Julio C., Montico, Marcella, Mooney, Meghan D., Moradi-Lakeh, Maziar, Moraga, Paula, Morawska, Lidia, Morrison, Shane D., Morozoff, Chloe, Mountjoy-Venning, Cliff, Mruts, Kalayu Birhane, Muller, Kate, Murthy, Gudlavalleti Venkata Satyanarayana, Musa, Kamarul Imran, Nachega, Jean B., Naheed, Aliya, Naldi, Luigi, Nangia, Vinay, Nascimento, Bruno Ramos, Nasher, Jamal T., Natarajan, Gopalakrishnan, Negoi, Ionut, Ngunjiri, Josephine Wanjiku, Cuong Tat, Nguyen, Grant, Nguyen, Minh, Nguyen, Quyen Le, Nguyen, Trang Huyen, Nguyen, Nichols, Emma, Ningrum, Dina Nur Anggraini, Vuong Minh, Nong, Noubiap, Jean Jacques N., Ogbo, Felix Akpojene, Oh, In-Hwan, Okoro, Anselm, Olagunju, Andrew Toyin, Olsen, Helen E., Olusanya, Bolajoko Olubukunola, Olusanya, Jacob Olusegun, Ong, Kanyin, Opio, John Nelson, Oren, Eyal, Ortiz, Alberto, Osman, Majdi, Ota, Erika, Pa, Mahesh, Pacella, Rosana E., Pakhale, Smita, Pana, Adrian, Panda, Basant Kumar, Panda-Jonas, Songhomitra, Papachristou, Christina, Park, Eun-Kee, Patten, Scott B., Patton, George C., Paudel, Deepak, Paulson, Katherine, Pereira, David M., Perez-Ruiz, Fernando, Perico, Norberto, Pervaiz, Aslam, Petzold, Max, Phillips, Michael Robert, Pigott, David M., Pinho, Christine, Plass, Dietrich, Pletcher, Martin A., Polinder, Suzanne, Postma, Maarten J., Pourmalek, Farshad, Purcell, Caroline, Qorbani, Mostafa, Radfar, Amir, Rafay, Anwar, Rahimi-Movaghar, Vafa, Rahman, Mahfuzar, Rahman, Mohammad Hifz Ur, Rai, Rajesh Kumar, Ranabhat, Chhabi Lal, Rankin, Zane, Rao, Puja C., Rath, Goura Kishor, Rawaf, Salman, Ray, Sarah E., Rehm, Jurgen, Reiner, Robert C., Reitsma, Marissa B., Remuzzi, Giuseppe, Rezaei, Satar, Rezai, Mohammad Sadegh, Rokni, Mohammad Bagher, Ronfani, Luca, Roshandel, Gholamreza, Roth, Gregory A., Rothenbacher, Dietrich, Ruhago, George Mugambage, Saadat, Rizwan S. A. Soheil, Sachdev, Perminder S., Sadat, Nafis, Safdarian, Mahdi, Safi, Sare, Safiri, Saeid, Sagar, Rajesh, Sahathevan, Ramesh, Salama, Joseph, Salamati, Payman, Salomon, Joshua A., Samy, Abdallah M., Sanabria, Juan Ramon, Dolores Sanchez-Nino, Maria, Santomauro, Damian, Santos, Itamar S., Milicevic, Milena M. Santric, Sartorius, Benn, Satpathy, Maheswar, Shahraz, Saeid, Schmidt, Maria Ines, Schneider, Ione J. C., Schulhofer-Wohl, Sam, Schutte, Aletta E., Schwebel, David				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	C., Schwendicke, Falk, Sepanlou, Sadaf G., Servan-Mori, Edson E., Shackelford, Katya Anne, Shaikh, Masood Ali, Shamsipour, Mansour, Shamsizadeh, Morteza, Islam, Sheikh Mohammed Shariful, Sharma, Jayendra, Sharma, Rajesh, She, Jun, Sheikhbahaei, Sara, Shey, Muki, Shi, Peilin, Shields, Chloe, Shigematsu, Mika, Shiri, Rahman, Shirude, Shreya, Shiue, Ivy, Shoman, Haitham, Shrime, Mark G., Sigfusdottir, Inga Dora, Silpakit, Naris, Silva, Joao Pedro, Singh, Abhishek, Singh, Jasvinder A., Skiadaresi, Eirini, Sligar, Amber, Smith, Alison, Smith, David L., Smith, Mari, Sobaih, Badr H. A., Soneji, Samir, Sorensen, Reed J. D., Soriano, Joan B., Sreeramareddy, Chandrashekhar T., Srinivasan, Vinay, Stanaway, Jeffrey D., Stathopoulou, Vasiliki, Steel, Nicholas, Stein, Dan J., Steiner, Caitlyn, Steinke, Sabine, Stokes, Mark Andrew, Strong, Mark, Strub, Bryan, Subart, Michelle, Sufiyan, Muawiyyah Babale, Sunguya, Bruno F., Sur, Patrick J., Swaminathan, Soumya, Sykes, Bryan L., Tabares-Seisdedos, Rafael, Tadakamadla, Santosh Kumar, Takahashi, Ken, Takala, Jukka S., Talongwa, Roberto Tchio, Tarawneh, Mohammed Rasoul, Tavakkoli, Mohammad, Taveira, Nuno, Tegegne, Teketo Kassaw, Tehrani-Banihashemi, Arash, Temsah, Mohamad-Hani, Terkawi, Abdullah Sulieman, Thakur, J. S., Thamsuwan, Ornwipa, Thankappan, Kavumpurathu Raman, Thomas, Katie E., Thompson, Alex H., Thomson, Alan J., Thrift, Amanda G., Tobe-Gai, Ruoyan, Topor-Madry, Roman, Torre, Anna, Tortajada, Miguel, Towbin, Jeffrey Allen, Bach Xuan, Tran, Troeger, Christopher, Truelsen, Thomas, Tsoi, Derrick, Tuzcu, Emin Murat, Tyrovolas, Stefanos, Ukwaja, Kingsley N., Undurraga, Eduardo A., Updike, Rachel, Uthman, Olalekan A., Uzochukwu, Benjamin S. Chudi, Van Boven, Job F. M., Vasankari, Tommi, Venketasubramanian, Narayanaswamy, Violante, Francesco S., Vlassov, Vasiliy Victorovich, Vollset, Stein Emil, Vos, Theo, Wakayo, Tolassa, Wallin, Mitchell T., Wang, Yuan-Pang, Weiderpass, Elisabete, Weintraub, Robert G., Weiss, Daniel J., Werdecker, Andrea, Westerman, Ronny, Whetter, Brian, Whiteford, Harvey A., Wijeratne, Tissa, Wiysonge, Charles Shey, Woldeyes, Belete Getahun, Wolfe, Charles D. A., Woodbrook, Rachel, Workicho, Abdulhalik, Xavier, Denis, Xiao, Qingyang, Xu, Gelin, Yaghoubi, Mohsen, Yakob, Bereket, Yano, Yuichiro, Yaseri, Mehdi, Yimam, Hassen Hamid, Yonemoto, Naohiro, Yoon, Seok-Jun, Yotebieng, Marcel, Younis, Mustafa Z., Zaidi, Zoubida, Zaki, Maysaa El Sayed, Zegeye, Elias Asfaw, Zenebe, Zerihun Menlkalew, Zerfu, Taddese Alemu, Zhang, Anthony Lin, Zhang, Xueying, Zipkin, Ben, Zodpey, Sanjay, Lopez, Alan D., Murray, Christopher J. L. and Collaborato, G. B. D. Causes Death Global, regional, and national age-sex specific mortality for 264 causes of death, 1980-2016: a 2 for the Global Burden of Disease Study 2016				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Lancet; 2017, 390 (10100): 1151-1210 Background Monitoring levels and trends in premature mortality is crucial to understanding how societies can address prominent sources of early death. The Global Burden of Disease 2016 Study (GBD 2016) provides a comprehensive assessment of cause-specific mortality for 264 causes in 195 locations from 1980 to 2016. This assessment includes evaluation of the expected epidemiological transition with changes in development and where local patterns deviate from these trends. Methods We estimated cause-specific deaths and years of life lost (YLLs) by age, sex, geography, and year. YLLs were calculated from the sum of each death multiplied by the standard life expectancy at each age. We used the GBD cause of death database composed of: vital registration (VR) data corrected for under-registration and garbage coding; national and subnational verbal autopsy (VA) studies corrected for garbage coding; and other sources including surveys and surveillance systems for specific causes such as maternal mortality. To facilitate assessment of quality, we reported on the fraction of deaths assigned to GBD Level 1 or Level 2 causes that cannot be underlying causes of death (major garbage codes) by location and year. Based on completeness, garbage coding, cause list detail, and time periods covered, we provided an overall data quality rating for each location with scores ranging from 0 stars (worst) to 5 stars (best). We used robust statistical methods including the Cause of Death Ensemble model (CODEm) to generate estimates for each location, year, age, and sex. We assessed observed and expected levels and trends of cause-specific deaths in relation to the Socio-demographic Index (SDI), a summary indicator derived from measures of average income per capita, educational attainment, and total fertility, with locations grouped into quintiles by SDI. Relative to GBD 2015, we expanded the GBD cause hierarchy by 18 causes of death for GBD 2016. Findings The quality of available data varied by location. Data quality in 25 countries rated in the highest category (5 stars), while 48, 30, 21, and 44 countries were rated at each of the succeeding data quality levels. Vital registration or verbal autopsy data were not available in 27 countries, resulting in the assignment of a zero value for data quality. Deaths from non-communicable diseases (NCDs) represented 72.3% (95% uncertainty interval [UI] 71.2-73.2) of deaths in 2016 with 19.3% (18.5-20.4) of deaths in that year occurring from communicable, maternal, neonatal, and nutritional (CMNN) diseases and a further 8.43% (8.00-8.67) from injuries. Although age-standardised rates of death from NCDs decreased globally between 2006 and				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	2016, total numbers of these deaths increased; both numbers and age-standardised rates of death from CMNN causes decreased in the decade 2006-16-age-standardised rates of deaths from injuries decreased but total numbers varied little. In 2016, the three leading global causes of death in children under-5 were lower respiratory infections, neonatal preterm birth complications, and neonatal encephalopathy due to birth asphyxia and trauma, combined resulting in 1.80 million deaths (95% UI 1.59 million to 1.89 million). Between 1990 and 2016, a profound shift toward deaths at older ages occurred with a 178% (95% UI 176-181) increase in deaths in ages 90-94 years and a 210% (208-212) increase in deaths older than age 95 years. The ten leading causes by rates of age-standardised YLL significantly decreased from 2006 to 2016 (median annualised rate of change was a decrease of 2.89%); the median annualised rate of change for all other causes was lower (a decrease of 1.59%) during the same interval. Globally, the five leading causes of total YLLs in 2016 were cardiovascular diseases; diarrhoea, lower respiratory infections, and other common infectious diseases; neoplasms; neonatal disorders; and HIV/AIDS and tuberculosis. At a finer level of disaggregation within cause groupings, the ten leading causes of total YLLs in 2016 were ischaemic heart disease, cerebrovascular disease, lower respiratory infections, diarrhoeal diseases, road injuries, malaria, neonatal preterm birth complications, HIV/AIDS, chronic obstructive pulmonary disease, and neonatal encephalopathy due to birth asphyxia and trauma. Ischaemic heart disease was the leading cause of total YLLs in 113 countries for men and 97 countries for women. Comparisons of observed levels of YLLs by countries, relative to the level of YLLs expected on the basis of SDI alone, highlighted distinct regional patterns including the greater than expected level of YLLs from malaria and from HIV/AIDS across sub-Saharan Africa; diabetes mellitus, especially in Oceania; interpersonal violence, notably within Latin America and the Caribbean; and cardiomyopathy and myocarditis, particularly in eastern and central Europe. The level of YLLs from ischaemic heart disease was less than expected in 117 of 195 locations. Other leading causes of YLLs for which YLLs were notably lower than expected included neonatal preterm birth complications in many locations in both south Asia and southeast Asia, and cerebrovascular disease in western Europe. Interpretation The past 37 years have featured declining rates of communicable, maternal, neonatal, and nutritional diseases across all quintiles of SDI, with faster than expected gains for many locations relative to their SDI. A global shift towards deaths at older ages suggests success in reducing many causes of early death. YLLs have increased globally for causes such as diabetes mellitus or some				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	neoplasms, and in some locations for causes such as drug use disorders, and conflict and terrorism. Increasing levels of YLLs might reflect outcomes from conditions that required high levels of care but for which effective treatments remain elusive, potentially increasing costs to health systems. FUNDING: Bill & Melinda Gates Foundation.				
434.	Naik D, Thomas N. Primary Hyperaldosteronism- its not about which side to take! World Journal of Endocrine Surgery. 2017 May 9(2) **Address:** Department of Endocrinology, **Christian Medical College, Vellore** **Abstract:** Primary hyperaldosteronism (PA) is one of most common causes of surgically remediable hypertension. The incidence of PA is much higher (5-10%) compared to what was previously (<1%) reported. 1 Patients with PA are at a greater risk for development of cardiovascular morbidity and mortality, renal and metabolic complications when compared to other hypertensive patients. 2 The most common causes of PA are aldosterone producing adenomas (APA), unilateral and bilateral diffuse hyperplasiad (DH). Sixty percent of patients with aldosterone over production have bilateral disease, and mineralcorticoid antagonists are the treatment of choice whereas, 40% have unilateral disease and may be cured by unilateral laparoscopic adrenalectomy (LA). Unilateral adrenal hyperplasia (UAH) is a rare entity. Recently a Swedish study showed that 50 patients were detected to have UAH postoperatively. 3 The long term follow-up data on postoperative adrenalectomy for cases of UAH is limited. A retrospective study from China reported unilateral LA in 164 patients. Following surgery, blood pressure normalised in 54%, improved in 44% and hypokalemia resolved in all patients. 4 Preoperative work-up is critical for distinguishing unilateral from bilateral disease. Aldosterone-renin ratio (ARR) is the most sensitive screening test for PA but the levels may be altered depending on the testing conditions, medications, variable assay methods and different cutoff levels for diagnosis. An elevated ARR >30 along with PAC >20 ng/dL is now universally accepted as a further confirmatory test in patients with PA. Hypokalemia as a screening test has low sensitivity and even the presence of hypokalemia has low negative predictive value. The commonly used confirmatory tests are saline infusion test (SIT), oral sodium loading test,	**NAT**	**JAN TO JUN**	**ENDOCRINOLOGY**	**Indexed in Scopus Impact Factor:0.35 H Index:**3

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	fludrocortisone suppression test, and Captopril challenge test. There is no single gold standard confirmatory test for PA, thus patients usually required more than one test to establish the diagnosis. Confirmatory tests that are also helpful in ruling out false ARR positive cases and thereby one can avoid invasive procedures like adrenal venous sampling (AVS). There is no single gold standard confirmatory test for PA as reliability, sensitivity and specificity varies, as shown by different studies. A prospective study from Italy showed that on the saline infusion test aldosterone with a cutoff of >6.8ng/dL has moderate sensitivity and specificity in discrimating between APA and idiopathic bilateral hyperplasia (IHA). 5 An adrenal computed tomography (CT) is the initial test of choice for localizing and sub-typing of aldosterone producing tumors. The CT scan finding in PA can be classified into cross-sectional image positive lesions which include APA and aldosterone producing carcinoma. The image negative PA includes unilateral micro-APA (<1 cm), UAH, IHA, multiple adrenocortical micronodule (MN) and bilateral macro-or microadenomas (or a combination of the two). The APA is typically characterized by a <2 cm size unilateral hypodense lesion (Hounsfield units <10) on CT scan. However, in the elderly (>35 years) a non-functioning adenoma is not uncommon, and can mimic APA on a CT scan. The AVS is essential in such cases to rule out APA. The CT scan findings may be normal or show nodular changes in patients with IHA. It also had several limitations and micro-APA is often incorrectly reported as normal or IHA. On the other hand the CT scan is often normal in subjects with UAH and MN and given the limitations of CT scans, further lateralization of aldosterone excess production by AVS is critical. A study from the Mayo clinic studied the accuracy of CT and AVS in 203 patients with PA. Both CT scan and AVS correctly identified unilateral disease in 53% of patients. A CT scan alone could have resulted in unnecessary adrenalectomy in one-fourth and one-fifth of patients who have been cured by unilateral adrenalectomy (UA) might have been incorrectly excluded. 6 Magnetic resonance imaging (MRI) has no added advantage over CT scan in characterisi g the lesion. A systematic review has shown that CT scan and MRI misdiagnose PA in 40% of cases while AVS shows definite lateralization. 7 Dukhabandhu Naik Nihal Thomas				
435.	Naik, D., Hesarghatta Shyamasunder, A., Doddabelavangala Mruthyunjaya, M., Gupta Patil, R., Paul, T. V., Christina, F., Inbakumari, M., Jose, R., Lionel, J., Regi, A., Jeyaseelan, P. V. and Thomas, N. Masked hypoglycemia in pregnancy J Diabetes; 2017, 9 (8): 778-786	**INT**	**JUL TO DEC**	**ENDOCRINOLOGY, OBSTETRICS AND GYNAECOLOGY**	**PMID:**27625296 **Impact Factor:** 3.039 **H-Index:** 30

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College, Vellore,** India. Department of Obstetrics and Gynaecology, **Christian Medical College, Vellore,** India. Biostatistics, **Christian Medical College, Vellore,** India. BACKGROUND: Hypoglycemia is a major hindrance for optimal glycemic control in women with gestational diabetes mellitus (GDM) on insulin. In the present study, masked hypoglycemia (glucose <2.77mmol/L for >/=30 min) was estimated in pregnant women using a continuous glucose monitoring (CGM) system. METHODS: Twenty pregnant women with GDM on insulin (cases) and 10 age-matched euglycemic pregnant women (controls) between 24 and 36 weeks gestation were recruited. Both groups performed self-monitoring of blood glucose (SMBG) and underwent CGM for 72 h to assess masked hypoglycemia. Masked hypoglycemic episodes were further stratified into two groups based on interstitial glucose (2.28-2.77 and </=2.22 mmol/L). RESULTS: Masked hypoglycemia was recorded in 35% (7/20) of cases and 40% (4/10) of controls using CGM, with an average of 1.28 and 1.25 episodes per subject, respectively. Time spent at glucose levels between 2.28 and 2.77 mmol/L did not differ between the two groups (mean 114 vs 90 min; P = 0.617), but cases spent a longer time with glucose </=2.2 mmol/L. Babies born to women with GDM were significantly lighter than those born to controls (2860 vs 3290 g; P = 0.012). There was no significant difference in birth weight within the groups among babies born to women with or without hypoglycemia. CONCLUSION: Euglycemic pregnant women and those with GDM on insulin had masked hypoglycemia. Masked hypoglycemia was not associated with adverse maternal or fetal outcomes. Therefore, low glucose levels in the hypoglycemic range may represent a physiologic adaptation in pregnancy. This response is exaggerated in women with GDM on insulin.				
436.	Nair, A. M., Goel, R., Hindhumati, M., Jayakanthan, K., Visalakshi, J., Joseph, G., Danda, S. and Danda, D. Serum amyloid A as a marker of disease activity and treatment response in Takayasu arteritis Rheumatol Int; 2017, 37 (10): 1643-1649 **Address:** Department of Clinical Immunology and Rheumatology, **Christian Medical College, Vellore,** Tamil Nadu, 632004, India.	**INT**	**JUL TO DEC**	**CLINICAL IMMUNOLOGY AND RHEUMATOLOGY, BIOSTATISTICS, CARDIOLOGY,**	**PMID:**28801814 **Impact Factor:** 1.824 **H-Index:** 58

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Cardiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Clinical Genetics, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Clinical Immunology and Rheumatology, **Christian Medical College, Vellore,** Tamil Nadu, 632004, India. debashisdandacmc@hotmail.com. Assessment of disease activity in Takayasu arteritis (TA) is challenging. We aimed to study utility of serum amyloid A (SAA) to assess disease activity and its association with SAA gene polymorphisms, if any, in our TA patients. Serum of 99 consecutive adult TA patients and 40 healthy controls were assayed for SAA. Depending on the ITAS2010 and ITAS-CRP score, patients were designated as having active disease if ITAS2010 >/= 2 or ITAS-CRP >/= 3 and stable disease if ITAS2010 = 0 or ITAS-CRP is </=1. Clinical ITAS of 0 with raised inflammatory markers scoring a ITAS-CRP of 2 was considered as indeterminate for disease activity assessment. Repeat SAA levels for active group was measured after 6 months from baseline. SAA levels between active and stable disease as well as serial levels were compared. DNA of 40 patients and controls were genotyped for SAA polymorphisms (rs12218, rs2468844) and the allele frequencies were compared. At baseline, SAA levels were higher in patients as compared to controls (137.4 vs 100.8 ng/ml, p = 0.001) and higher in patients with active disease (166.4 ng/ml) than those with stable disease (98.2 ng/ml), p = 0.001. SAA decreased during follow-up in treatment responders (189.9 ng/ml at baseline vs 119.0 ng/ml at follow-up, p = 0.008); in contrast, there was no significant change among non-responders during follow-up. Allelic frequencies of SAA gene polymorphisms did not differ between cases and controls. SAA may be a reliable biomarker to assess disease activity and treatment response in TA.			**CLINICAL GENETICS**	
437.	Nair, A. M., Goel, R., Hindhumati, M., Shah, K., Chandana, P., Jayaseelan, V., Jayakanthan, K., Joseph, G., Danda, S. and Danda, D. C-reactive protein gene polymorphisms (rs1205) in Asian Indian patients with Takayasu arteritis: Associations and phenotype correlations Int J Rheum Dis; 2017, **Address:** Department of Clinical Immunology and Rheumatology, **Christian Medical College, Vellore,** Tamil Nadu, India. ONE Centre for Rheumatology and Genetics, Vadodara, Gujarat, India. AceProbe Technologies (India) Pvt. Ltd, Delhi, National Capital Territory, India.	**INT**	**JUL TO DEC**	**CLINICAL IMMUNOLOGY AND RHEUMATOLOGY, BIOSTATISTICS, CARDIOLOGY, CLINICAL**	**PMID:**29024426 **Impact Factor:** 2.624 **H-Index:** 27

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Cardiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Clinical Genetics, **Christian Medical College, Vellore,** Tamil Nadu, India. BACKGROUND/PURPOSE: Normal C-reactive protein (CRP) in active Takayasu arteritis (TA) is a dilemma. We attempted to validate our pilot study finding of rs1205 in CRP gene being protective against TA. METHODS: Genomic DNA of 104 patients and 185 sex-matched healthy controls were genotyped for rs1205 by Taqman assay. Clinical details, demography, angiographic and activity scores (Indian Takayasu arteritis score 2010) were recorded prospectively at baseline and during follow-up visits for 12 months. Minor allele frequency (MAF) and genotype distribution between patients and controls as well as patient subgroups were compared using chi(2) test with Bonferroni correction (pc) and logistic regression was performed to determine independent associations. RESULTS: The majority of patients (n = 84) and controls (n = 166) were females. MAF of T allele of rs1205 was less frequent in patients (27%) as compared to controls (37.6%), P = 0.013, pc = 0.026 with an odds ratio of 0.632 irrespective of gender. Frequency of CC genotype was higher in cases (53.8%) than controls (37.3%), P = 0.006, pc = 0.018. A dominant model of genotype-phenotype association revealed CC to be associated with more frequent coronary arterial and ascending aorta involvement than the other genotypes clubbed together (P = 0.01 and P = 0.014, respectively). Blunted CRP response seems to be less frequent in patients with CC genotype (P = 0.064). CONCLUSION: T allele of rs1205 in CRP gene was less frequent in TA. CC genotype was associated with involvement of coronary arteries and ascending aorta. CC genotype was less commonly associated with blunted CRP response (CT + TT > CC).			**GENETICS**	
438.	Nair, A. M., Sandhya, P., Yadav, B. and Danda, D. TNFalpha blockers followed by continuation of sulfasalazine and methotrexate combination: a retrospective study on cost saving options of treatment in Spondyloarthritis Clinical Rheumatology; 2017, 36 (10): 2243-2251 **Address:** Department of Clinical Immunology and Rheumatology, **Christian**	**INT**	**JAN TO JUN**	**CLINICAL IMMUNOLOGY AND RHEUMATOLOGY**	**PMID:**28646368 **Impact Factor:** 2.365 **H-Index:** 68

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Medical College, Vellore, Tamil Nadu, 632004, India. Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Clinical Immunology and Rheumatology, **Christian Medical College, Vellore,** Tamil Nadu, 632004, India. debashisdandacmc@hotmail.com High cost deters continuous use of tumor necrosis factor alpha blockers (TNFi) in developing countries. The objective of this study was to evaluate outcome and expenditure incurred in Spondyloarthritis (SpA) patients beyond a year of follow-up after receiving four doses of infliximab (IFX) over and above background therapy of methotrexate (MTX) and sulfasalazine (SSZ) combination. Electronic medical records were screened for patients with SpA satisfying the Assessment of Spondyloarthritis International Society (ASAS) criteria between 2008 and 2014. Patients who completed at least 1 year of follow-up after receiving four doses of IFX (5 mg/kg at 0, 2, 6, and 14 weeks) on a background therapy of MTX (10-25 mg/week) and SSZ (2-3 g/day) combination were enrolled after obtaining an informed consent. Primary outcome assessed was "time to disease flare". Changes in acute phase reactants, patient reported outcomes (BASDAI, BASFI), and cost were also assessed. Forty-five patients were enrolled. Mean (SD) duration of follow up after fourth IFX dose was 28.9 (18.7) months. Disease flare occurred in 33.3% (15/45) after a mean (SD) duration of 14.5 (10.8) months as compared to 4-6 months described in literature on discontinuing TNFi. Reduction in ESR, CRP, BASDAI and BASFI continued to be statistically significant at follow-up as compared to baseline. As compared to continuous IFX therapy, this treatment reduced cost by 57.1% for each patient-month of follow-up. Short course IFX dosing followed by continuation of MTX and SSZ combination can prolong time to disease flare and decrease requirement for additional IFX dose in SpA. This regimen could be a cost saving option for patients with SpA.				
439.	Nair, B. R., Jonathan, E., Moorthy, R. K., Rajshekhar, V. and George, O. An Adult with Atrial Septal Defect Presenting with a Brain Abscess Asian J Neurosurg; 2017, 12 (4): 743-745 **Address:** Department of Neurological Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Cardiology, **Christian Medical College, Vellore,** Tamil Nadu, India. The common heart diseases resulting in a brain abscess are associated with a right to left shunt and include tetralogy of Fallot and transposition of great vessels. Atrial	**INT**	**JUL TO DEC**	**NEUROLOGICAL SCIENCES, CARDIOLOGY**	**PMID:**29114300 **PMCID:**5652112 **Impact Factor:** 5.000 **H-Index:** NA

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	septal defect (ASD) is almost always associated with the left to right shunt and therefore is not a commonly considered risk factor for brain abscess. We report the case of a 29-year-old male, with no symptoms of cardiac disease, who presented with the left posterior frontal pyogenic abscess which led to the detection of a silent ASD. Our case emphasizes the need for a careful evaluation of the source of infection in patients with a brain abscess.				
440.	Nair, S. and Rajagopal, R. Hyperemia Causing Delayed Recovery in Traumatic Brain Injury Indian J Crit Care Med; 2017, 21 (4): 232-234 **Address:** Department of Neurosciences, Neuro Intensive Care Unit, **Christian Medical College, Vellore,** Tamil Nadu, India. Subarachnoid hemorrhage is a common manifestation of traumatic brain injury. A clinical deterioration in Glasgow Coma Scale score without an accompanying radiological worsening is suggestive of vasospasm. However, hyperemia could be another possibility which can easily be considered with corroborating transcranial Doppler (TCD) features. This case report reiterates the value of TCD in such instances.	**NAT**	**JAN TO JUN**	**NEUROSCIENCES, NEURO INTENSIVE CARE UNIT**	**PMID:**28515610 **Impact Factor:** 0.760 **H-Index:** 19
441.	Nand KY(1), Oommen AM(1), Chacko RK(2), Abraham VJ(1). Chronic periodontitis among diabetics and nondiabetics aged 35-65 years, in a rural block in Vellore, Tamil Nadu: A cross-sectional study. J Indian Soc Periodontol. 2017 Jul-Aug;21(4):309-314. doi:10.4103/jisp.jisp_217_17. **Author information:** (1)Department of Community Health, **Christian Medical College, Vellore,** Tamil Nadu, India. (2)Department of Dental Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. Background: Chronic periodontitis is a common cause of poor oral health globally. Those at higher risk of this preventable and easily treatable condition need to be	**NAT**	**JUL TO DEC**	**COMMUNITY HEALTH, DENTAL SCIENCES**	**PMID:**29456306 **PMCID:** **PMC**5813346

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	identified so that efforts can be taken to decrease disease burden and subsequent consequences. Aims: The aims of the study were (1) To compare the prevalence of chronic periodontitis among individuals with and without type 2 diabetes, aged 35-65 years from a rural block in Vellore, Tamil Nadu and (2) to assess risk factors for chronic periodontitis among individuals with diabetes. Settings and Design: A cross-sectional study was done in nine villages of Kaniyambadi block, Vellore, between October 2015 and July 2016 among participants aged 35-65 years of a previous cross-sectional survey which had identified individuals with and without type 2 diabetes. Materials and Methods: Chronic periodontitis was assessed using the Community Periodontal Index and Treatment Needs index. Oral hygiene was assessed clinically using the Simplified Oral Hygiene Index. Diabetes was defined as on medication for type 2 diabetes or detected to have fasting blood glucose ≥126 mg/dl (in a previous survey). Statistical Analysis: Chi-square test and odds ratios (adjusted using logistic regression) were used to study risk factors for periodontitis among those with diabetes. Results: Prevalence of chronic periodontitis was 45.9% (95% confidence interval [CI]: 40.88%-50.9%) among 98 individuals with diabetes and 35.6% (95% CI:30.91-40.29%) among 104 individuals without diabetes. Poor oral hygiene (odds ratio: 8.33, 95% CI: 3.33-25.00), low socioeconomic status (odds ratio: 3.19, 95% CI: 1.00-10.12), and smoking (odds ratio: 3.51, 95% CI: 1.17-10.51) were associated with periodontitis among diabetics. Conclusions: Individuals with type 2 diabetes have a higher prevalence of periodontitis. As poor oral hygiene is a strong risk factor for periodontitis, there is a need for targeted education regarding dental hygiene to reduce this preventable condition. DOI: 10.4103/jisp.jisp_217_17 Conflict of interest statement: There are no conflicts of interest.				
442.	Naren Satya, S. M., Mayilvaganan, K. R., Prathyusha, I. S., Gautam, M. S., Raidu, D. and Amogh, V. N. A Recurrent Case of Pentalogy of Cantrell: A Rare Case with Sonological Findings and Review of Literature Pol J Radiol; 2017, 82 28-31 **Address:** Department of Radiodiagnosis, M.V. Jayaram Medical College and Research Hospital, Bangalore, India. Department of Obstetrics and Gynecology, Rajarajeswari Medical College and	**INT**	**JAN TO JUN**	**RADIODIAGNOSIS**	**PMID:**28203309 **Impact Factor:** 0.900 **H-Index:** 11

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Hospital, Bangalore, India. Department of Radiodiagnosis, Jawaharlal Nehru Medical College, Belgaum, India. Department of Obstetrics and Gynecology, M.V. Jayaram Medical College and Research Hospital, Bangalore, India. Department of Radiodiagnosis, **Christian Medical College, Vellore,** India. **BACKGROUND:** Pentalogy of Cantrell (POC) is an extremely rare and complex congenital anomaly. Ultrasound is a valuable, safe, nonionizing, cost effective, widely available, and easily reproducible imaging tool and is indispensible in the diagnosis of POC. Despite the rarity of POC, it is imperative for a radiologist to be aware of its wide spectrum of presentation on ultrasound in first trimester of gestation. Most reported cases in literature till now have been sporadic. In this paper, we aimed to report for the first time in literature, a recurrent case of POC detected in the first trimester in a mother whose previous pregnancy also was terminated in the second trimester medically due to the ultrasound diagnosis of POC. We also discuss the role of ultrasound and other imaging modalities in a case of POC as well as the differential diagnoses which can mimic POC. CASE REPORT: A 23-year-old G2P0A1 (Gravida2, para0, abortion1) woman with a gestational age of around 12 weeks was referred for a routine first trimester ultrasound scan. The antenatal ultrasound scan showed a single, live, intrauterine gestation corresponding to a gestational age of 11 weeks and 5 days. The fetal heart was visualized outside the chest through a defect in the lower sternum in association with anterior diaphragmatic and ventral abdominal wall defects suggestive of thoraco-abdominal variety of ectopia cardis. There was a membrane covered, midline, abdominal wall defect at the base of the umbilical cord insertion containing the herniated abdominal organs including the liver, bowel loops and the ectopic cardia. There was a breach in the normal outline of the lower sternum indicating a sternal deficiency. The fetal pericardium was absent. The nuchal translucency was grossly increased. Pentalogy of Cantrell was diagnosed on ultrasound and the patient was explained about the poor prognosis of this condition. An informed consent was obtained after she opted for medical termination of pregnancy. The autopsy confirmed all the above mentioned ultrasound features. **CONCLUSIONS:** Pentalogy of Cantrell (POC) is an extremely rare and complex syndrome of numerous fetal anomalies but should always be borne in the mind during the ultrasound evaluation of either of an omphalocele, ectopia cordis, distal sternal defect, pericardial defect, anterior diaphragmatic defect or intracardiac anomalies. Ultrasound is a valuable, safe, nonionizing, cost effective, widely available, and				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	easily reproducible imaging tool for diagnosis of POC. Ultrasound should always be the primary mode of diagnosis in POC because although Magnetic resonance imaging (MRI) can help in better delineation of fetal anomalies, it does not significantly alter the course of the pregnancy or the management of POC.				
443.	Natarajan, K., Abraham, P. and Kota, R. Activation of the mitochondrial apoptotic pathway contributes to methotrexate-induced small intestinal injury in rats Cell Biochem Funct; 2017, 35 (7): 378-391 **Address:** Department of Biochemistry, **Christian Medical College Campus,** Vellore, Tamil Nadu, India. Department of Pathology, Madha Medical College Thandalam, Chennai, Tamil Nadu, India. The efficacy of methotrexate (MTX), a commonly used chemotherapeutic drug, is limited by intestinal injury. As the mechanism of MTX-induced small intestinal injury is not clear, there is no definitive treatment for MTX-induced gastrointestinal injury. The present study investigates the role of mitochondrial apoptotic pathway in MTX-induced small intestinal injury and examines whether aminoguanidine is effective in preventing the damage. Eight Wistar rats were administered 3 consecutive i.p. injections of 7 mg/kg body wt. MTX. Some rats were pretreated with 30 mg or 50 mg/kg body wt. of aminoguanidine (n = 6 in each group). Protein expressions of cytochrome c, caspases 3 and 9, and PARP-1 were determined in the small intestines by immunohistochemistry and western blot. Mitochondrial pathway of apoptosis was activated in the small intestines of MTX-treated rats as evidenced by intense immunostaining for cyt c, caspases 9 and 3, and PARP-1 and mitochondrial release of cyt c, activation of caspases, and PARP-1 cleavage by Western blot. Immunofluorescence revealed increased nuclear localization of PARP-1. Aminoguanidine pretreatment ameliorated MTX-induced small intestinal injury in dose-dependent manner and inactivated the mitochondrial apoptotic pathway. Aminoguanidine may possess beneficial intestinal protective effects as an adjuvant co-drug against MTX intestinal toxicity during cancer chemotherapy. As the mechanism of MTX-induced small intestinal injury is not clear, there is no definitive treatment for MTX-induced gastrointestinal injury. The results of the present study show that the mitochondrial pathway of apoptosis plays a role in MTX-induced small intestinal injury as evidenced by cytochrome c release, activation of caspases 9 and 3, PARP-1 cleavage, and DNA fragmentation. Aminoguanidine (AG)	**INT**	**JUL TO DEC**	**BIOCHEMISTRY**	**PMID:**28871597 **Impact Factor:** 2.186 **H-Index:** 50

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	pretreatment attenuates the severity of small-intestinal injury induced in rats by MTX treatment. The mechanisms of action of AG involve inhibition of iNOS, and mitochondrial pathway of apoptosis. It is suggested that aminoguanidine may possess beneficial intestinal protective effects as an adjuvant co-drug against MTX intestinal toxicity during cancer chemotherapy.				
444.	Natarajan, K., Abraham, P., Kota, R. and Selvakumar, D. Aminoguanidine pretreatment prevents methotrexate-induced small intestinal injury in the rat by attenuating nitrosative stress and restoring the activities of vital mitochondrial enzymes J Basic Clin Physiol Pharmacol; 2017, 28 (3): 239-247 **Address:** Department of Biochemistry, **Christian Medical College,** Bagayam, Vellore, Tamil Nadu. Department of Biochemistry, **Christian Medical College,** Bagayam, Vellore 632002, Tamil Nadu. Department of Pathology, Madha Medical College, Thandalam, Kovur, Chennai, Tamil Nadu. **BACKGROUND:** One of the major toxic side effects of methotrexate (MTX) is enterocolitis, for which there is no efficient standard treatment. Nitric oxide overproduction has been reported to play an important role in MTX-induced mucositis. This study was designed to investigate whether pretreatment with aminoguanidine (AG) - a selective iNOS inhibitor - prevents MTX-induced mucositis in rats. **METHODS:** Rats were pretreated with AG (30 and 50 mg/kg body weight) i.p. daily 1 h before MTX (7 mg/kg body weight) administration for 3 consecutive days. After the final dose of MTX, the rats were killed, and the small intestines were used for analysis. **RESULTS:** The small intestines of MTX-treated rats showed moderate to severe injury. Pretreatment with AG had a dose-dependent protective effect on MTX-induced mucositis. AG pretreatment reduced iNOS protein levels, mucosal nitric oxide levels, and protein tyrosine nitration. AG pretreatment also restored the activities of electron transport chain (ETC) complexes, vital tricarboxylic acid (TCA cycle) enzymes, and mitochondrial antioxidant enzymes. **CONCLUSIONS:** These findings suggest that AG is beneficial in ameliorating MTX-induced enteritis in rats.	**INT**	**JAN TO JUN**	**BIOCHEMISTRY**	**PMID:**28099126 **Impact Factor:** 0.750 **H-Index:** 28
445.	Neeraj Kulkarni, S.M. Deepti Pinto Rosario, Bijesh Yadav, Manisha Madhai Beck, Ruby Jose, Peripartum hysterectomy: lessons learnt over a decade in a tertiary	**INT**	**JAN TO JUN**	**OBSTETRICS AND**	**Impact Factor:**4.758

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	care center, INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH : VOLUME-6, Issue_5 | May_2017 **Address:** Neeraj Kulkarni DGO, PG Registrar, Department of Obstetrics and Gynecology Unit IV, **Christian Medical College,** India; S.M. Deepti Pinto Rosario DGO, PG Registrar, Department of Obstetrics and Gynecology Unit IV, **Christian Medical College,** India; Bijesh Yadav Senior Demonstrator, Department of Biostatistics, **Christian Medical College,** India; Manisha Madhai Beck, Associate Professor and Head, Department of Obstetrics and Gynecology Unit IV, **Christian Medical College,** India; Ruby Jose, Professor and Head (Retired), Department of Obstetrics and Gynecology Unit IV, **Christian Medical College,** India. Introduction: Peripartum hysterectomy (PH) is generally performed at the time or within 24 hours of delivery. □e aim of the study is to study the setting, risk factors, outcomes in women who had PH in a tertiary care hospital in India, and to assess the resource preparation needed to manage the maternal morbidity in these women. Material and Methods: All women who had peripartum hysterectomy (PH) in the Institution from January 1, 2004 to December 31, 2013 were identified and data abstracted. Demographics, obstetric, surgical details of women who had PH, and details of the estimated blood loss, the quantity of blood and products transfused and other outcomes including involvement of organ systems were collected. Results: 21 women out of 1, 03,420 deliveries in the Institution, underwent PH, giving an incidence of 0.04% (1 in 2000 deliveries). □e number of PH's performed, increased from 6, between 2004 and 2007, to 31 between 2008 and 2013, a 70% rise. Caesarian delivery (CD) resulting in PH was common with scar dehiscence/ rupture 5(13.9%). Two common indications for PH were atonic uterus 15 (41.7%) and adherent placenta 7(19.4%). An estimated blood loss of >4000ml occurred in one third of them, 12 (33.3%). All the women had hematologic complications, liver and renal complications occurred in 1/3rd.Blood and blood products were transfused in 31(86.1%) and 66 % respectively. Conclusion: CD rates should be strictly brought down. In women with previous CD and abnormal placentation, the risk of PH should be anticipated and adequately prepared for.			**GYNECOLOGY UNIT IV BIOSTATISTICS,**	Indexed in Copernicus
446.	Nemani, S., Agrawal, B., Danda, S. and George, B. Gaucher Disease Presenting in an Adult with Intracerebral Bleed	**NAT**	**JAN TO JUN**	**CLINICAL HEMATOLOGY, PATHOLOGY,**	**PMID:**28527173 **Impact Factor:** 0.370 **H-Index:** 48

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	J Assoc Physicians India; 2017, 65 (4): 89-90 **Address:** Department of Clinical Hematology.Department of Pathology. Department of Medical Genetics, **Christian Medical College and Hospital, Vellore**, Tamil Nadu. Gaucher disease (GD) is the most common lysosomal storage disorder, caused by deficiency of acid beta glucosidase. GD usually presents in children but occasional cases can present in adulthood. Here we report a case of type I GD in a 37 year old female who presented with intracerebral bleed due to long standing thrombocytopenia. She underwent splenectomy in view of limited resources for enzyme replacement therapy. With splenectomy her platelet counts normalised and neurological status also improved.			**MEDICAL GENETICS**	
447.	Nicoletti, Paola, Devarbhavi, Harshad, Goel, Ashish, **Eapen, C. E**., Venkatesan, Radha, Grove, Jane I., Daly, Ann K. and Aithal, Guruprasad P. Genome-wide association study (GWAS) to identify genetic risk factors that increase susceptibility to anti-tuberculosis drug-induced liver injury (ATDILI) Hepatology; 2017, 66 25A-25A	**INT**	**JUL TO DEC**	**GASTROINTESTINAL SCIENCES**	**NO PMID** **WOS:**000412089800045 **Impact Factor:** 13.246 **H-Index:** 306
448.	Ninan, Fibi, Mishra, Ajay, John, Ajoy and Ramya, Iyadurai Retroperitoneal fibrosis: A rare manifestation of extramedullary dissemination of multiple myeloma Current Medical Issues; 2017, 15 (4): 282-284 **Address:** Department of General Medicine, **CMC, Vellore**, Tamil Nadu, India Multiple myeloma is a neoplasm that occurs due to monoclonal proliferation of plasma cells. Anemia, hypercalcemia, renal failure, and osteolytic lesions are the common manifestations. Less than 5% of patients present with extramedullary dissemination at the time of diagnosis. The common sites of extramedullary dissemination are liver, spleen, adrenals, and lung. Spread of myeloma into retroperitoneum causing retroperitoneal fibrosis is one of the rare manifestations. Patients with disseminated myeloma are usually young and have a poor disease-free survival rate. Aggressive therapy in the form of stem cell transplant has shown to be of benefit in such patients.	**NAT**	**JAN TO JUN**	**MEDICINE UNIT V**	**Not Indexed in PubMed**
449.	Nirmal, B. Yellow Light in Dermatoscopy and Its Utility in Dermatological Disorders	**NAT**	**JUL TO DEC**	**DERMATOLOGY**	**PMID:**28979885 **PMCID:**5621212

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Indian Dermatol Online J; 2017, 8 (5): 384-385 **Address:** Department of Dermatology, **Christian Medical College, Vellore,** Tamil Nadu, India.				**Impact Factor:** 0.750 **H-Index:** NA
450.	Nirmal, B. Dermatoscopy Image Characteristics and Differences among Commonly Used Standard Dermatoscopes Indian Dermatol Online J; 2017, 8 (3): 233-234 **Address:** Department of Dermatology, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JAN TO JUN**	**DERMATOLOGY**	**PMID:**28584773 **Impact Factor:** 0.750 **H-Index:** NA
451.	Nirmal, B., George, R. and Kodiatte, T. A. Dermatoscopy of palmar wart with falooda seed appearance Australas J Dermatol; 2017, **Address:** Department of Dermatology, **Christian Medical College, Vellore,** India. Department of Pathology, **Christian Medical College, Vellore,** India.	**INT**	**JUL TO DEC**	**DERMATOLOGY, PATHOLOGY**	**PMID:**28736807 **Impact Factor:** 1.304 **H-Index:** 43
452.	Nirmal, B., George, R. and Kodiatte, T. A. Invisible Lichen Planopilaris Unmasked by Dermatoscopy Int J Trichology; 2017, 9 (2): 76-78 **Address:** Department of Dermatology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Pathology, **Christian Medical College, Vellore,** Tamil Nadu, India. Lichen planopilaris is a form of lymphocyte-mediated primary cicatricial alopecia characterized by perifollicular scaling progressing to patches of alopecia depending on the clinical variant. The course is relentlessly progressive and chronic. Hence, early diagnosis and institution of therapy are imperative to halt the disease progress. Although definitive diagnosis is made by scalp biopsy, the detection is usually delayed. Dermatoscopy helps in early recognition of this condition which at that stage is clinically invisible. We report a 23-year-old female who presented with hair loss and scalp scaling without clinically obvious patches of alopecia.	**INT**	**JUL TO DEC**	**DERMATOLOGY, PATHOLOGY**	**PMID:**28839393 **PMCID:**5551312 **Impact Factor:**1.390 **H-Index:** 12
453.	Noor, A., Gunasekaran, S. and Vijayalakshmi, M. A. Improvement of Insulin Secretion and Pancreatic beta-cell Function in Streptozotocin-induced Diabetic Rats Treated with Aloe vera Extract	**INT**	**JUL TO DEC**	**PHYSIOLOGY**	**PMID:29333050** **PMC ID:5757335** **Impact Factor:**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Pharmacognosy Res; 2017, 9 (Suppl 1): S99-S104 Address: Centre for Bio Separation Technology, VIT University, Vellore, Tamil Nadu, India. Department of Physiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Integrative Biology, School of Bio Sciences and Technology, VIT University, Vellore, Tamil Nadu, India. Background: Diabetes mellitus is a metabolic disorder characterized by chronic hyperglycemia. Plant extracts and their products are being used as an alternative system of medicine for the treatment of diabetes. Aloe vera has been traditionally used to treat several diseases and it exhibits antioxidant, anti-inflammatory, and wound-healing effects. Streptozotocin (STZ)-induced Wistar diabetic rats were used in this study to understand the potential protective effect of A. vera extract on the pancreatic islets. Objective: The aim of the present study was to evaluate the A. vera extract on improvement of insulin secretion and pancreatic beta-cell function by morphometric analysis of pancreatic islets in STZ-induced diabetic Wistar rats. Materials and Methods: After acclimatization, male Wistar rats, maintained as per the Committee for the Purpose of Control and Supervision of Experiments on Animals guidelines, were randomly divided into four groups of six rats each. Fasting plasma glucose and insulin levels were assessed. The effect of A. vera extract in STZ-induced diabetic rats on the pancreatic islets by morphometric analysis was evaluated. Results: Oral administration of A. vera extract (300 mg/kg) daily to diabetic rats for 3 weeks showed restoration of blood glucose levels to normal levels with a concomitant increase in insulin levels upon feeding with A. vera extract in STZ-induced diabetic rats. Morphometric analysis of pancreatic sections revealed quantitative and qualitative gain in terms of number, diameter, volume, and area of the pancreatic islets of diabetic rats treated with A. vera extract when compared to the untreated diabetic rats. Conclusion: A. vera extract exerts antidiabetic effects by improving insulin secretion and pancreatic beta-cell function by restoring pancreatic islet mass in STZ-induced diabetic Wistar rats. SUMMARY: Fasting plasma glucose (FPG) and insulin levels were restored to normal levels in diabetic rats treated with Aloe vera extractIslets of pancreas were qualitatively and quantitatively restored to normalcy leading to restoration of FPG and insulin levels of diabetic rats treated with Aloe vera extractMorphometric analysis of pancreatic sections revealed quantitative and qualitative gain in terms of number, diameter, volume, and area of the pancreatic islets of diabetic rats treated with Aloe vera extract when compared to the untreated diabetic rats. Abbreviations Used:A. vera, FPG: Fasting plasma glucose, STZ: Streptozotocin, BW: Body weight.				NA **H-Index:**NA
454.	Noronha, V., Sharma, V., Joshi, A., Patil, V. M., Laskar, S. G. and Prabhash, K. Carboplatin-based concurrent chemoradiation therapy in locally advanced head and neck cancer patients who are unfit for cisplatin therapy Indian J Cancer; 2017, 54 (2): 453-457 Address: Department of Medical Oncology, Tata Memorial Hospital, Dr E Borges Marg, Parel, Mumbai, Maharashtra, India. Department of Hematology, Bone Marrow Transplantation Unit, **Christian Medical College,**	**NAT**	**JAN TO JUNE**	**HEMATOLOGY**	**PMID:29469077** **Impact Factor:** 0.497 H-Index:28

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Vellore, Tamil Nadu, India. Department of Radiation Oncology, Tata Memorial Hospital, Dr E Borges Marg, Parel, Mumbai, Maharashtra, India. BACKGROUND: Cisplatin-based chemoradiation (CTRT) is the standard of care in locally advanced head and neck cancers. Limited treatment options are available in patients unfit for cisplatin. AIMS: This audit was carried out to study the toxicities, tolerance, and outcomes of carboplatin-based CTRT in patients who are not eligible for cisplatin. MATERIALS AND METHODS: A total of 63 locally advanced head and neck cancer patients treated between January 2011 and October 2015 were administered carboplatin-based CTRT. The dose of carboplatin was equivalent to area under the curve equivalent to 2 administered once a week for a maximum of 7 cycles. Toxicity was coded as per the CTCAE version 4.03. SPSS software version 16 was used for statistical analysis. STATISTICAL ANALYSIS: Descriptive statistics was performed. Progression-free survival (PFS) and overall survival (OS) were estimated by Kaplan-Meier survival analysis. Cox proportional hazard model was used for identifying factors affecting PFS and OS. RESULTS: The reasons for patients being unfit for cisplatin were low serum creatinine clearance in 41 (65.07%), sensorineural hearing loss in 18 (28.57%), uncontrolled medical comorbidities in 3 (4.76%), and old age in 1 patient (1.6%). 53 patients (84.1%) completed planned radiotherapy. The median number of chemotherapy cycles administered was 6. Grade 3-4 toxicities were seen in 32 patients (50.8%). The median OS and PFS were 28 months (95% confidence interval [CI]: 20.9-34.6 months) and 17 months (95% CI: 08.2-25.7 months), respectively. Age was the only factor significantly affecting OS and PFS. CONCLUSION: Carboplatin-based CTRT is well tolerated in patients unfit for cisplatin and seems to have superior outcomes than those reported in radical radiotherapy studies.				
455.	O'hara, J., Diop, S., Hollingsworth, R., Srivastava, A., Lillicrap, D., Van Den Berg, H. M., Herr, C., Coffin, D., Iorio, A. and Pierce, G. F. The Development of the World Bleeding Disorders Registry Pilot Phase Haemophilia; 2017, 23 80-80 AUTHOR INFORMATION: 1HCD Economics, London, UK; 2Cheikh Anta Diop University, Dakar, Senegal; 3Medical Data Solutions and Services (MDSAS), Manchester, UK; 4**Christian Medical College, Vellore,** India; 5Queen's University, Kingston, Canada; 6University Medical Center, Utrecht, The Netherlands; 7World Federation of Hemophilia, Montreal, Canada; 8McMaster University, Hamilton, Canada	**INT**	**JUL TO DEC**	**HAEMATOLOGY**	**NO PMID** **WOS:**000393554500131 **Impact Factor:** 3.569 **H-Index:** 79

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
456.	Oldenburg, J., Kulkarni, R., Srivastava, A., Mahlangu, J. N., Blanchette, V. S., Tsao, E., Winding, B., Dumont, J. and Jain, N. Improved joint health in subjects with severe haemophilia A treated prophylactically with recombinant factor VIII Fc fusion protein Haemophilia; 2017, **Address:** Institute of Experimental Haematology and Transfusion Medicine, University Clinic Bonn, Bonn, Germany. Department of Pediatrics and Human Development, Michigan State University, East Lansing, MI, USA. Department of Haematology, **Christian Medical College, Vellore,** Tamil Nadu, India. Haemophilia Comprehensive Care Centre, Faculty of Health Sciences, University of the Witwatersrand and NHLS, Johannesburg, South Africa. Department of Pediatrics, University of Toronto and Division of Hematology/Oncology, Hospital for Sick Children, University of Toronto, Toronto, ON, Canada. Bioverativ, Waltham, MA, USA. Sobi, Stockholm, Sweden. INTRODUCTION: Joint arthropathy is the long-term consequence of joint bleeding in people with severe haemophilia. AIM: This study assessed change in joint health over time in subjects receiving recombinant factor VIII Fc fusion protein (rFVIIIFc) prophylaxis. METHODS: ALONG is the phase 3 pivotal study in which the benefit of rFVIIIFc as a prophylactic treatment for bleeding control was shown in previously treated severe haemophilia patients >/=12 years of age (arm 1: 25-65 IU/kg every 3-5 days, arm 2: 65 IU/kg weekly and arm 3: episodic). After completing ALONG, subjects had the option to enrol into the extension study (ASPIRE). This interim, post hoc analysis assessed changes in joint health over ~2.8 years in these patients. RESULTS: Forty-seven subjects had modified Haemophilia Joint Health Score (mHJHS) data at A-LONG baseline, ASPIRE baseline and ASPIRE Year 1 and Year 2. Compared with A-LONG baseline (23.4), mean improvement at ASPIRE Year 2 was -4.1 (95% confidence interval [CI], -6.5, -1.8; P = .001). Regardless of prestudy treatment regimen, subjects showed continuous improvement in mHJHS from A-LONG baseline through ASPIRE Year 2 (prestudy prophylaxis: -2.4, P = .09; prestudy episodic treatment: -7.2, P = .003). Benefits were seen in subjects with target joints (-5.6, P = .005) as well as those with severe arthropathy (-8.8, P = .02). The mHJHS components with the greatest improvement at ASPIRE Year 2 were swelling (-1.4, P = .008), range of motion (-	**INT**	**JUL TO DEC**	**HAEMATOLOGY**	**PMID:**29082639 **Impact Factor:** 3.569 **H-Index:** 79

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	1.1, P = .03) and strength (-0.8, P = .04). CONCLUSIONS: Prophylaxis with rFVIIIFc may improve joint health over time regardless of prestudy prophylaxis or episodic treatment regimens.				
457.	Olortegui, M. P., Rouhani, S., Yori, P. P., Salas, M. S., Trigoso, D. R., Mondal, D., Bodhidatta, L., Platts-Mills, J., Samie, A., Kabir, F., Lima, A., **Babji, S.,** Shrestha, S. K., Mason, C. J., Kalam, A., Bessong, P., Ahmed, T., Mduma, E., Bhutta, Z. A., Lima, I., Ramdass, R., Moulton, L. H., Lang, D., George, A., Zaidi, A. K. M., Kang, G., Houpt, E. R. and Kosek, M. N. Astrovirus Infection and Diarrhea in 8 Countries Pediatrics; 2018, 141 (1): **Address:** Asociacion Benefica PRISMA, Iquitos, Peru. Department of International Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland. icddr,b, Dhaka, Bangladesh. Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand. Division of Infectious Diseases and International Health, University of Virginia, Charlottesville, Virginia. University of Venda, Thohoyandou, South Africa. Aga Khan University, Naushahro Feroze, Pakistan. Universidade Federal do Ceara, Fortaleza, Brazil. **Christian Medical College, Vellore,** India. Centre for International Health, University of Bergen, Bergen, Norway. Haydom Lutheran Hospital, Haydom, Tanzania. Fogarty International Center, National Institutes of Health, Bethesda, Maryland; and. Foundation for the National Institutes of Health, Bethesda, Maryland. Asociacion Benefica PRISMA, Iquitos, Peru; mkosek@jhu.edu. BACKGROUND AND OBJECTIVES: Astroviruses are important drivers of viral gastroenteritis but remain understudied in community settings and low- and middle-income countries. We present data from 8 countries with high prevalence of diarrhea and undernutrition to describe astrovirus epidemiology and assess evidence for protective immunity among children 0 to 2 years of age. METHODS: We used 25 898 surveillance stools and 7077 diarrheal stools contributed by 2082 children for enteropathogen testing, and longitudinal statistical analysis to describe incidence, risk factors, and protective immunity. RESULTS: Thirty-five percent of	**INT**	**JUL TO DEC**	**GASTROINTESTINAL SCIENCES**	**PMID:**29259078 **Impact Factor:** 5.705 **H-Index:** 282

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	children experienced astrovirus infections. Prevalence in diarrheal stools was 5.6%, and severity exceeded all enteropathogens except rotavirus. Incidence of infection and diarrhea were 2.12 and 0.88 episodes per 100 child-months, respectively. Children with astrovirus infection had 2.30 times the odds of experiencing diarrhea after adjustment for covariates (95% confidence interval [CI], 2.01-2.62; P < .001). Undernutrition was a risk factor: odds of infection and diarrhea were reduced by 10% and 13%, respectively, per increase in length-for-age z score (infection: odds ratio, 0.90 [95% CI, 0.85-0.96]; P < .001; diarrhea: odds ratio, 0.87 [95% CI, 0.79-0.96]; P = .006). Some evidence of protective immunity to infection was detected (hazard ratio, 0.84 [95% CI, 0.71-1.00], P = .052), although this was heterogeneous between sites and significant in India and Peru. CONCLUSIONS: Astrovirus is an overlooked cause of diarrhea among vulnerable children worldwide. With the evidence presented here, we highlight the need for future research as well as the potential for astrovirus to be a target for vaccine development.				
458.	Olson, J. D., Jennings, I., Meijer, P., Bon, C., Bonar, R., Favaloro, E. J., Higgins, R. A., Keeney, M., Mammen, J., Marlar, R. A., Meley, R., Nair, S. C., Nichols, W. L., Raby, A., Reverter, J. C., Srivastava, A. and Walker, I. Lack of grading agreement among international hemostasis external quality assessment programs Blood Coagul Fibrinolysis; 2017, **Address:** Department of Pathology, University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA. United Kingdom National External Quality Assurance Service - Blood Coagulation (UK-NEQAS-BC), Sheffield, UK. ECAT Founation, Voorschoten, The Netherlands. Association ProBioQual, Lyon, France. RCPAQAP Haematology. Department of Haematology, Institute of Clinical Pathology and Medical Research, Westmead Hospital, Sydney, New South Wales, Australia. College of American Pathologists, Northfield, Illinois, USA. Institute for Quality Management in Healthcare, Toronto, Ontario, Canada. Department of Immunohematology and Transfusion Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Pathology, University of New Mexico, Albuquerque, New Mexico, USA.	**INT**	**JUL TO DEC**	**IMMUNOHEMATOLOGY AND TRANSFUSION MEDICINE, HAEMATOLOGY**	**PMID:**29232255 **Impact Factor:** 1.367 **H-Index:** 64

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Laboratoire d'Hematologie, Hopital Nord, Saint-Etienne, France. Special Coagulation Laboratory (Hematopathology), Mayo Clinic, Rochester, Minnesota, USA. Laboratorio de Evaluacion Externa de la Calidad en Hematologia (LEECH), Hospital Clinic Barcelona, Barcelona, Spain. Department of Haematology, **Christian Medical College, Vellore,** Tamil Nadu, India.: Laboratory quality programs rely on internal quality control and external quality assessment (EQA). EQA programs provide unknown specimens for the laboratory to test. The laboratory's result is compared with other (peer) laboratories performing the same test. EQA programs assign target values using a variety of methods statistical tools and performance assessment of 'pass' or 'fail' is made. EQA provider members of the international organization, external quality assurance in thrombosis and hemostasis, took part in a study to compare outcome of performance analysis using the same data set of laboratory results. Eleven EQA organizations using eight different analytical approaches participated. Data for a normal and prolonged activated partial thromboplastin time (aPTT) and a normal and reduced factor VIII (FVIII) from 218 laboratories were sent to the EQA providers who analyzed the data set using their method of evaluation for aPTT and FVIII, determining the performance for each laboratory record in the data set. Providers also summarized their statistical approach to assignment of target values and laboratory performance. Each laboratory record in the data set was graded pass/fail by all EQA providers for each of the four analytes. There was a lack of agreement of pass/fail grading among EQA programs. Discordance in the grading was 17.9 and 11% of normal and prolonged aPTT results, respectively, and 20.2 and 17.4% of normal and reduced FVIII results, respectively. All EQA programs in this study employed statistical methods compliant with the International Standardization Organization (ISO), ISO 13528, yet the evaluation of laboratory results for all four analytes showed remarkable grading discordance.				
459.	Oommen, A. M., Abraham, V. J., Sathish, T., Jose, V. J. and George, K. Performance of the Achutha Menon Centre Diabetes Risk Score in Identifying Prevalent Diabetes in Tamil Nadu, India Diabetes Metab J; 2017, 41 (5): 386-392 **Address:** Department of Community Health, **Christian Medical College, Vellore,** India. anuoommen@cmcvellore.ac.in. Department of Community Health, **Christian Medical College, Vellore,** India.	**INT**	**JUL TO DEC**	**COMMUNITY HEALTH, CARDIOLOGY**	**PMID:**29086537 **PMCID:**5663678 **Impact Factor:** 4.101 **H-Index:** 27

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Centre for Population Health Sciences, Nanyang Technological University, Singapore, Singapore. Department of Cardiology, **Christian Medical College, Vellore,** India. BACKGROUND: The Achutha Menon Centre Diabetes Risk Score (AMCDRS), which was developed in rural Kerala State, South India, had not previously been externally validated. We examined the performance of the AMCDRS in urban and rural areas in the district of Vellore in the South Indian state of Tamil Nadu, and compared it with other diabetes risk scores developed from India. METHODS: We used the data from 4,896 participants (30 to 64 years) of a cross-sectional study conducted in Vellore (2010 to 2012), to calculate the AMCDRS scores using age, family history, and waist circumference. Sensitivity, specificity, positive predictive value (PPV), and negative predictive values (NPV), and the area under the receiver operating characteristic curve (AROC) were calculated for undiagnosed and total diabetes. RESULTS: Of the 4,896 individuals surveyed, 274 (5.6%) had undiagnosed diabetes and 759 (15.5%) had total diabetes. The AMCDRS, with an optimum cut-point of >/=4, identified 45.0% for further testing with 59.5% sensitivity, 60.5% specificity, 9.1% PPV, 95.8% NPV, and an AROC of 0.639 (95% confidence interval [CI], 0.608 to 0.670) for undiagnosed diabetes. The corresponding figures for total diabetes were 75.1%, 60.5%, 25.9%, 93.0%, and 0.731 (95% CI, 0.713 to 0.750), respectively. The AROC for the AMCDRS was not significantly different from that of the Indian Diabetes Risk Score, the Ramachandran or the Chaturvedi risk scores for total diabetes, but was significantly lower than the AROC of the Chaturvedi score for undiagnosed diabetes. CONCLUSION: The AMCDRS is a simple diabetes risk score that can be used to screen for undiagnosed and total diabetes in low-resource primary care settings in India. However, it probably requires recalibration to improve its performance for undiagnosed diabetes.				
460.	Oommen, A. M., Nand, K., Abraham, V. J., George, K. and Jose, V. J. Prevalence of statin use among high-risk patients in urban and rural Vellore, Tamil Nadu: A population-based cross-sectional study Indian J Pharmacol; 2017, 49 (2): 201-204 **Address:** Department of Community Health, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Cardiology, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JUL TO DEC**	**COMMUNITY HEALTH, CARDIOLOGY**	**PMID:**28706335 **PMCID:**5497444 **Impact Factor:** 0.638 **H-Index:** 47

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	OBJECTIVES: This study assessed statin use among diabetics and those with coronary heart disease (CHD) in Vellore, Tamil Nadu. METHODS: A cross-sectional survey was conducted in rural and urban Vellore, among 6196 participants (30-64 years), in 2010-2012. Statin use among those with known CHD and diabetes (on diabetic medication) was recorded. A randomly selected sample of rural diabetics was resurveyed in 2016 to reassess statin use. RESULTS: Among 61 with CHD, 23 (37.7%) were on statins. Statin use among 422 diabetics aged >/=40 years with low-density lipoprotein >/=70 mg/dl was 13.4% in urban and 7.6% among rural. Statin usage among rural diabetics aged >/=40 years increased from 7.7% in 2010-2012 to 16.6% in 2016. CONCLUSIONS: Statin use for CHD was below 50% although higher than the use among diabetics, indicating the need to address this low rate of usage among these high-risk groups.				
461.	Oommen, A. M., Vyas, R., Faith, M., Selvakumar, D. and George, K. Curriculum development for a module on noncommunicable diseases for the master of public health program Educ Health (Abingdon); 2017, 30 (3): 236-239 Address: Department of Community Health, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Physiology, Medical Education Unit, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Biochemistry, Medical Education Unit, **Christian Medical College, Vellore,** Tamil Nadu, India. Background: As the burden of noncommunicable diseases (NCDs) has been rising globally, various educational programs have introduced chronic disease epidemiology teaching, which is now a component of most of the Master of Public Health (MPH) programs. However, the process of curriculum development for these courses has not been adequately documented for use by educators planning such courses. Methods: A detailed process of curriculum development based on David Kern's six-step approach was undertaken for a 2-week course on NCDs, as part of the MPH program of a tertiary institution in South India. The processes were documented so that the method of curriculum development for such a course could be made available for educators across this field. Results: The course on NCDs was carried out over 73 learning hours (2 weeks) for a group of MPH students including medical, dental, allied health, and nursing graduates. Evaluation of the revised curriculum at the end of the 2 weeks revealed that mean scores for knowledge and confidence in skills increased by 50% (11.1-16.6, t-test, P < 0.001) and 79% (3.3-5.9, t-test, P = 0.002), respectively, from baseline scores. Discussion: The revised curriculum was effective in improving knowledge and confidence in epidemiological skills. The documented process of curricular development using standard methods if made publicly available can be of use to those involved in	**INT**	**JAN TO JUNE**	**COMMUNITY HEALTH, PHYSIOLOGY, MEDICAL EDUCATION UNIT, BIOCHEMISTRY**	**PMID:29786027** **Impact Factor:** NA **H-Index:**NA

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	planning similar educational programs for students of public health.				
462.	Oommen, Samuel, Bhattacharyya, Suman, Koshy, Beena, Roshan, Reeba, Samuel, Lincy and Preethi, R Management of autism spectrum disorder: A case-based overview Current Medical Issues; 2017, 15 (1): 17-27 **Address:** Department of Developmental Pediatrics, Developmental Paediatrics Unit, **Christian Medical College, Vellore,** Tamil Nadu, India The management of autism spectrum disorder requires a multidisciplinary team (MDT) comprising parents, therapists, psychologists, special educators, and medical specialists. Therapy is aimed at helping the child acquire functional skills in daily living, to minimize the core features of autism, and eliminate behaviors that are unhelpful or disruptive. The child must be adequately assessed by every member of the MDT to formulate an intervention plan which is then brought together to tailor a specific treatment plan for each child. The involvement of the parents or caretakers in the entire process is critical. The plan should address multiple areas such as communication, social skills, behavior, daily living, motor skills, and learning early and intensive treatment has been shown to be much more effective than treatment that is delayed. The child's progress should be monitored and documented, and only then can the intervention model's effectiveness be gauged.	**NAT**	**JUL TO DEC**	**DEVELOPMENTAL PAEDIATRICS**	**Not Indexed in PubMed**
463.	Operario, D. J., Platts-Mills, J. A., Nadan, S., Page, N., Seheri, M., Mphahlele, J., Praharaj, I., Kang, G., Araujo, I. T., Leite, J. P. G., Cowley, D., Thomas, S., Kirkwood, C. D., Dennis, F., Armah, G., Mwenda, J. M., Wijesinghe, P. R., Rey, G., Grabovac, V., Berejena, C., Simwaka, C. J., Uwimana, J., Sherchand, J. B., Thu, H. M., Galagoda, G., Bonkoungou, I. J. O., Jagne, S., Tsolenyanu, E., Diop, A., Enweronu-Laryea, C., Borbor, S. A., Liu, J., Mcmurry, T., Lopman, B., Parashar, U., Gentsch, J., Steele, A. D., Cohen, A., Serhan, F. and Houpt, E. R. Etiology of Severe Acute Watery Diarrhea in Children in the Global Rotavirus Surveillance Network Using Quantitative Polymerase Chain Reaction J Infect Dis; 2017, 216 (2): 220-227 **Address:** University of Virginia, Charlottesville. National Institute for Communicable Diseases, Johannesburg. South African Medical Research Council/Diarrhoeal Pathogens Research Unit, Department of Virology, Sefako Makgatho Health Sciences University, Pretoria,	**INT**	**JUL TO DEC**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28838152 **Impact Factor:** 6.273 **H-Index:** 220

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	South Africa. **Christian Medical College, Vellore,** India. Instituto Oswaldo Cruz/Fiocruz, Rio de Janeiro, Brazil. Murdoch Childrens Research Institute, Melbourne, Australia. Noguchi Memorial Institute for Medical Research, Accra, Ghana. World Health Organization (WHO) Regional Office for Africa, Brazzaville, Republic of the Congo. WHO Regional Office for South-East Asia, New Delhi, India. WHO Regional Office for the Americas, District of Columbia. WHO Regional Office for the Western Pacific, Manila, the Philippines. University of Zimbabwe, Harare. University Teaching Hospital, Lusaka, Zambia. Ministry of Health, Kigali, Rwanda. Tribhuvan University, Kathmandu, Nepal. Department of Medical Research, Yangon, Myanmar. Medical Research Institute, Colombo, Sri Lanka. Laboratoire National de Sante Publique, Ouagadougou, Burkina Faso. National Public Health Laboratories, Fajara, The Gambia. Sylvanus Olympio Teaching Hospital, Lome, Togo. Albert Royer National Paediatric Hospital Laboratory, Dakar, Senegal. University of Ghana Medical School, Accra. University of Sierra Leone, Freetown. Emory University. Centers for Disease Control and Prevention, Atlanta, Georgia. Bill & Melinda Gates Foundation, Seattle, Washington. World Health Organization, Geneva, Switzerland. Background: The etiology of acute watery diarrhea remains poorly characterized, particularly after rotavirus vaccine introduction. Methods: We performed quantitative polymerase chain reaction for multiple enteropathogens on 878 acute watery diarrheal stools sampled from 14643 episodes captured by surveillance of children <5 years of age during 2013-2014 from 16 countries. We used previously developed models of the association between pathogen quantity and diarrhea to calculate pathogen-specific weighted attributable fractions (AFs). Results: Rotavirus remained the leading etiology (overall weighted AF, 40.3% [95% confidence interval {CI}, 37.6%-44.3%]), though the AF was substantially lower in the Americas (AF, 12.2 [95% CI, 8.9-15.6]), based on samples from a country with				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	universal rotavirus vaccination. Norovirus GII (AF, 6.2 [95% CI, 2.8-9.2]), Cryptosporidium (AF, 5.8 [95% CI, 4.0-7.6]), Shigella (AF, 4.7 [95% CI, 2.8-6.9]), heat-stable enterotoxin-producing Escherichia coli (ST-ETEC) (AF, 4.2 [95% CI, 2.0-6.1]), and adenovirus 40/41 (AF, 4.2 [95% CI, 2.9-5.5]) were also important. In the Africa Region, the rotavirus AF declined from 54.8% (95% CI, 48.3%-61.5%) in rotavirus vaccine age-ineligible children to 20.0% (95% CI, 12.4%-30.4%) in age-eligible children. Conclusions: Rotavirus remained the leading etiology of acute watery diarrhea despite a clear impact of rotavirus vaccine introduction. Norovirus GII, Cryptosporidium, Shigella, ST-ETEC, and adenovirus 40/41 were also important. Prospective surveillance can help identify priorities for further reducing the burden of diarrhea.				
464.	Ostrovidov, S., Ahadian, S., Ramon-Azcon, J., Hosseini, V., Fujie, T., Parthiban, S. P., Shiku, H., Matsue, T., Kaji, H., Ramalingam, M., Bae, H. and Khademhosseini, A. Three-dimensional co-culture of C2C12/PC12 cells improves skeletal muscle tissue formation and function J Tissue Eng Regen Med; 2017, 11 (2): 582-595 **Address:** Advanced Institute for Materials Research (WPI), Tohoku University, Sendai, Japan. Laboratory of Applied Mechanobiology, Department of Health Sciences and Technology, ETH, Zurich, Switzerland. Department of Life Science and Medical Bioscience, School of Advanced Science and Engineering, Waseda University, Tokyo, Japan. Graduate School of Environmental Studies, Tohoku University, Sendai, Japan. Department of Bioengineering and Robotics, Graduate School of Engineering, Tohoku University, Sendai, Japan. Centre for Stem Cell Research, A unit of the Institute for Stem Cell Biology and Regenerative Medicine, **Christian Medical College Campus,** Vellore, India. Institut National de la Sante et de la Recherche Medicale U977, Faculte de Chirurgie Dentaire, Universite de Strasbourg, France. College of Animal Bioscience and Technology, Department of Bioindustrial Technologies, Konkuk University, Seoul, Republic of Korea. Department of Maxillofacial Biomedical Engineering and Institute of Oral Biology, School of Dentistry, Kyung Hee University, Seoul, Republic of Korea. Biomaterials Innovation Research Center, Department of Medicine, Brigham and	**INT**	**JUL TO DEC**	**CENTRE FOR STEM CELL RESEARCH**	**PMID:**25393357 **Impact Factor:** 3.989 **H-Index:** 50

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Women's Hospital, Harvard Medical School and Harvard-MIT Division of Health Sciences and Technology, Massachusetts Institute of Technology, Cambridge, MA, USA. Wyss Institute for Biologically Inspired Engineering, Harvard University, Boston, MA, USA. Center of Nanotechnology, King Abdulaziz University, Jeddah, Saudi Arabia. Engineered muscle tissues demonstrate properties far from native muscle tissue. Therefore, fabrication of muscle tissues with enhanced functionalities is required to enable their use in various applications. To improve the formation of mature muscle tissues with higher functionalities, we co-cultured C2C12 myoblasts and PC12 neural cells. While alignment of the myoblasts was obtained by culturing the cells in micropatterned methacrylated gelatin (GelMA) hydrogels, we studied the effects of the neural cells (PC12) on the formation and maturation of muscle tissues. Myoblasts cultured in the presence of neural cells showed improved differentiation, with enhanced myotube formation. Myotube alignment, length and coverage area were increased. In addition, the mRNA expression of muscle differentiation markers (Myf-5, myogenin, Mefc2, MLP), muscle maturation markers (MHC-IId/x, MHC-IIa, MHC-IIb, MHC-pn, alpha-actinin, sarcomeric actinin) and the neuromuscular markers (AChE, AChR-epsilon) were also upregulated. All these observations were amplified after further muscle tissue maturation under electrical stimulation. Our data suggest a synergistic effect on the C2C12 differentiation induced by PC12 cells, which could be useful for creating improved muscle tissue. Copyright (c) 2014 John Wiley & Sons, Ltd.				
465.	P Brito-Zerón1,2, N Acar-Denizli3, M Zeher4, A Rasmussen5, R Seror6, T Mandl7, X Li8, C Baldini9, J-E Gottenberg10, D Danda11, R Priori12, L Quartuccio13, G Hernandez-Molina14, AA Kruize15, S-H Park16, M Kvarnström17, S Praprotnik18, D Sene19, E Bartoloni20, R Solans21, Y Suzuki22, D Isenberg23, M Rischmueller24, G Nordmark25, G Fraile26, A Sebastian27, A Vissink28, T Nakamura29, V Valim30, R Giacomelli31, V Devauchelle-Pensec32, B Hofauer33, M Bombardieri34, V Trevisani35, D Hammenfors36, SE Carsons37, SG Pasoto38, J Morel39, S Retamozo40, TA Gheita41, F Atzeni42, C Vollenveider43, X Mariette6, M Ramos-Casals2, on behalf of the EULAR-SS Task Force Big Data Consortium Poster Presentations - SLE, Sjögren's and APS - clinical aspects (other than treatment)	**INT**	**JUL TO DEC**	**MEDICAL GENETICS**	**NO PMID** WOS:000413181402588 **Impact Factor:** 6.918 **H-Index:** 271

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	SAT0302 Analysis of 9302 patients from the big data international primary sjÖgren syndrome cohort: clinical presentation at diagnosis of european vs non-european patients Arthritis & Rheumatology; 2017, Volume 76, Issue Suppl 2, 69 **Author affiliations:** Hosp CIMA-Sanitas Hosp Clínic, Barcelona, Spain Msgsü, Istanbul, Turkey Univ, Debrecen, Hungary OMRF, Oklahoma, United States Univ Paris Sud, Paris, France Lund Univ, Malmö, Sweden Anhui Hosp, Hefei, China Univ, Pisa, Italy Univ, Strasbourg, France **CMC, Vellore, India** Sapienza Univ, Rome Santa Maria, Udine, Italy INCMNSZ, México City, Mexico UMC, Utrecht, Netherlands Catholic Univ Korea, Seoul, Korea, Republic Of Karolinska Instit, Stockholm, Sweden UMCL, Ljubljana, Slovenia Lariboisière Hosp, Paris, France Univ, Perugia, Italy Hosp Vall d'Hebron, Barcelona, Spain Univ Hosp, Kanazawa, Japan UCL, London, United Kingdom TQEH, Adelaide, Australia Univ, Uppsala, Sweden Hosp Ramȯn y Cajal, Madrid, Spain Med Hosp, Wroclaw, Poland Univ, Groningen, Netherlands Univ, Nagasaki, Japan UFES, Vitȯria, Brazil				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Univ, L'Aquila, Italy Univ, Brest, France TUM, München, Germany QMUL, London, United Kingdom UNIFESP, Sao Paulo, Brazil Haukeland Hosp, Bergen, Norway School Med SBU, Mineola, United States USP, Sao Paulo, Brazil Univ, Montpellier, France INICSA, Cordoba, Argentina Univ, Cairo, Egypt L.Sacco Univ, Milan, Italy German Hosp, Buenos Aires, Argentina Abstract: Objectives Baseline characterization of European patients diagnosed with primary Sjögren syndrome (SS) according to the 2002 AE criteria. Methods The Big Data Sjögren Project was formed in 2014 to take a "high-definition" picture of the main features of primary SS by merging international SS databases. International experts of the EULAR-SS Task Force were invited to participate. By January 2017, the database included 9302 consecutive patients recruited from 21 countries of the 5 continents. Results A total of 6586 (71%) patients were included from European countries. In comparison with non-European countries, European patients had a higher mean age (54 v 51yrs, p<0.001), higher frequency of men (7% v 5%, p=0.001), dry eyes (94% vs 88%, p<0.001), dry mouth (94% vs 91%, p<0.001), and lower frequency of abnormal ocular (84 vs 86%, p=0.049) and oral (75 vs 81%, p<0.001) tests. Immunologically, European patients had a lower frequency of anti-Ro/La antibodies (69 vs 78%, p<0.001) and a higher frequency of RF (50 vs 47%, p=0.01), low C4 (14 vs 9%, p<0.001) and cryoglobulins (8% vs 3%, p<0.001). Logistic regression identified as independent variables older age (OR 1.02), male gender (OR 2.62), abnormal oral tests (OR 0.26), anti-Ro/La antibodies (OR 0.69), RF (OR 1.76), low C4 (OR 1.97) and cryoglobulins (OR 3.85). Conclusions European patients are diagnosed at older age, are more frequently men, and presented a lower frequency of anti-Ro/La antibodies and a higher frequency of immunological markers related to mixed cryoglobulinemia. Disclosure of Interest None declared. http://dx.doi.org/10.1136/annrheumdis-2017-eular.3502				
466.	Paarel, J. P., Singh, G., Punnen, G. E. and Prabhu, K.	**INT**	**JUL TO**	**RADIOLOGY**	**PMID:**26998651

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	The Use of Intracranial Doppler as a Cause for Intraoperative Hyperthermia J Neurosurg Anesthesiol; 2017, 29 (3): 363-364 **Address:Christian Medical College and Hospital** Vellore, Vellore, Tamil Nadu, India.		**DEC**		**Impact Factor:** 3.925 **H-Index:** 52
467.	Padhye, K. P., Murugan, Y., Milton, R., Nambi Raj, N. A. and David, K. S. The "Skipped Segment Screw" Construct: An Alternative to Conventional Lateral Mass Fixation-Biomechanical Analysis in a Porcine Cervical Spine Model Asian Spine J; 2017, 11 (5): 733-738 **Address:** Department of Spinal Disorders, **Christian Medical College,** Ida Scudder Road, Vellore, India. Division of Photonics, Vellore Institute of Technology, Near Katpadi Road, Vellore, India. Study Design: Cadaveric biomechanical study. Purpose: We compared the "skipped segment screw" (SSS) construct with the conventional "all segment screw" (ASS) construct for cervical spine fixation in six degrees of freedom in terms of the range of motion (ROM). Overview of Literature: Currently, no clear guidelines are available in the literature for the configuration of lateral mass (LM) screwrod fixation for cervical spine stabilization. Most surgeons tend to insert screws bilaterally at all segments from C3 to C6 with the assumption that implants at every level will provide maximum stability. Methods: Six porcine cervical spine specimens were harvested from fresh 6-9-month-old pigs. Each specimen was sequentially tested in the following order: intact uninstrumented (UIS), SSS (LM screws in C3, C5, and C7 bilaterally), and ASS (LM screws in C3-C7 bilaterally). Biomechanical testing was performed with a force of 2 Nm in six degrees of freedom and 3D motion tracking was performed. Results: The two-tailed paired t-test was used for statistical analysis. There was a significant decrease in ROM in instrumented specimens compared with that in UIS specimens in all six degrees of motion ($p<0.05$), whereas there was no significant difference in ROM between the different types of constructs (SSS and ASS). Conclusions: Because both configurations provide comparable stability under physiological loading, we provide a biomechanical basis for the use of SSS configuration owing to its potential clinical advantages, such as relatively less bulk of implants within a small operative field,	**INT**	**JUL TO DEC**	**SPINAL DISORDERS**	**PMID:**29093783 **PMC ID:**5662856 **SCOPUS** **Impact Factor:** 1.160 **H-Index:** 12

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	relative ease of manipulating the rod into position, shorter surgical time, less blood loss, lower risk of screw-related complications, less implant-related costs, and most importantly, no compromise in the required stability needed until fusion.				
468.	Panda, A. Revisiting prostate cancer: Can we separate the wheat from the chaff? Indian J Urol; 2017, 33 (2): 97-98 **Address:** Associate Editor, Indian Journal of Urology,Department of Urology, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JAN TO JUN**	**UROLOGY**	**PMID:**28469293 **Impact Factor:** 5.157 **H-Index:** 21
469.	Panda, A. What's inside Indian J Urol; 2017, 33 (2): 99-100 **Address:** Department of Urology, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JAN TO JUN**	**UROLOGY**	**PMID:**28469294 **Impact Factor:** 5.157 **H-Index:** 21
470.	Pandian, R. M., John, N. T., Eapen, A., Antonisamy, B., Devasia, A. and Kekre, N. Does MRI help in the pre - operative evaluation of pelvic fracture urethral distraction defect? - A pilot study Int Braz J Urol; 2017, 43 (1): 127-133 **Address:** Department of Urology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Radiology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Biostatistics, **Christian Medical College and Hospital,** Tamil Nadu, India. **OBJECTIVES:** To study the usefulness of MRI in preoperative evaluation of PFUDD. Can MRI provide additional information on urethral distraction defect (UDD) and cause of erectile dysfunction (ED)? **MATERIALS AND METHODS:** In this prospective study, consecutive male patients presenting with PFUDD were included from Feb 2011 till Dec 2012. Those with traumatic spinal cord injury and pre-existing ED were excluded. Patients were assessed using IIEF questionnaire, retrograde urethrogram and micturating cystourethrogram (RGU+MCU) and MRI pelvis. Primary end point was erectile function and secondary end point was surgical outcome. **RESULTS:** Twenty patients were included in this study. Fourteen	**INT**	**JAN TO JUN**	**UROLOGY, RADIOLOGY, BIOSTATISTICS**	**PMID:**28124535 **Impact Factor:** 0.815 **H-Index:** 30

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	patients (70%) were </=40years; fifteen patients (75%) had ED, seven patients (35%) had severe ED. MRI findings associated with ED were longer median UDD (23mm vs. 15mm, p=0.07), cavernosal injury (100%, p=0.53), rectal injury (100%, p=0.53), retropubic scarring (60%, p=0.62) and prostatic displacement (60%, p=0.99). Twelve patients (60%) had a good surgical outcome, five (25%) had an acceptable outcome, three (15%) had a poor outcome. Poor surgical outcome was associated with rectal injury (66.7%, p=0.08), cavernosal injury (25%, p=0.19), retropubic scarring (18.1%, p=0.99) and prostatic displacement (16.7%, p=0.99). Five patients with normal erections had good surgical outcome. Three patients with ED had poor outcome (20%, p=0.20). **CONCLUSIONS:** MRI did not offer significant advantage over MCU in the subgroup of men with normal erections. Cavernosal injury noted on MRI strongly correlated with ED. Role of MRI may be limited to the subgroup with ED or an inconclusive MCU.				
471.	Panwar, J., Mathew, A. and Thomas, B. P. Cystic lesions of peripheral nerves: Are we missing the diagnosis of the intraneural ganglion cyst? World J Radiol; 2017, 9 (5): 230-244 **Address:** Jyoti Panwar, Department of Radiology, **Christian Medical College, Vellore** 632004, India. **AIM:** To highlight the salient magnetic resonance imaging (MRI) features of the intraneural ganglion cyst (INGC) of various peripheral nerves for their precise diagnosis and to differentiate them from other intra and extra-neural cystic lesions. **METHODS:** A retrospective analysis of the magnetic resonance (MR) images of a cohort of 245 patients presenting with nerve palsy involving different peripheral nerves was done. MR images were analyzed for the presence of a nerve lesion, and if found, it was further characterized as solid or cystic. The serial axial, coronal and sagittal MR images of the lesions diagnosed as INGC were studied for their pattern and the anatomical extent along the course of the affected nerve and its branches. Its relation to identifiable anatomical landmarks, intra-articular communication and presence of denervation changes in the muscles supplied by involved nerve was also studied. **RESULTS:** A total of 45 cystic lesions in the intra or extraneural locations of the nerves were identified from the 245 MR scans done for patients presenting with nerve palsy. Out of these 45 cystic lesions, 13 were diagnosed to have INGC of a peripheral nerve on MRI. The other cystic lesions included extraneural ganglion cyst, paralabral cyst impinging upon the suprascapular nerve,	**INT**	**JAN TO JUN**	**RADIOLOGY**	**PMID:**28634514 **Impact Factor:** NA **H-Index:** NA

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	cystic schwannoma and nerve abscesses related to Hansen's disease involving various peripheral nerves. Thirteen lesions of INGC were identified in 12 patients. Seven of these affected the common peroneal nerve with one patient having a bilateral involvement. Two lesions each were noted in the tibial and suprascapular nerves, and one each in the obturator and proximal sciatic nerve. An intra-articular connection along the articular branch was demonstrated in 12 out of 13 lesions. Varying stages of denervation atrophy of the supplied muscles of the affected nerves were seen in 7 cases. Out of these 13 lesions in 12 patients, 6 underwent surgery. **CONCLUSION:** INGC is an important cause of reversible mono-neuropathy if diagnosed early and surgically treated. Its classic MRI pattern differentiates it from other lesions of the peripheral nerve and aid in its therapeutic planning. In each case, the joint connection has to be identified preoperatively, and the same should be excised during surgery to prevent further cyst recurrence.				
472.	Panwar, J., Mathew, A. J., Jindal, N. and Danda, D. Utility of Plain Radiographs in Metabolic Bone Disease - A Case-Based Pictorial Review from a Tertiary Centre Pol J Radiol; 2017, 82 333-344 **Address:** Department of Radiology, **Christian Medical College, Vellore,** Tamilnadu, India. Joint Department of Medical Imaging, University of Toronto, Toronto, ON, Canada. Department of Clinical Immunology and Rheumatology, **Christian Medical College, Vellore,** Tamilnadu, India. In this era of advanced high-tech imaging, the utility of plain radiographs in conditions of the bone is increasingly being overseen by both clinicians and radiologists. Plain radiography is the first-line, essential screening or diagnostic tool for diverse bone diseases, where magnetic resonance imaging (MRI) may be non-contributory. Plain radiographs often play a pivotal role in diagnosing metabolic bone disorders. This paper from a single tertiary care centre discusses ten real-life patients with metabolic bone conditions and other bone diseases with near-normal MRI of the spine, in whom plain radiographs revealed subtle findings and aided in making diagnoses. Each of these cases had a non-specific clinical presentation. They all showed inconclusive features on MRI, but subtle important radiographic findings led to a specific diagnosis. Plain radiography is key in diagnosing bone diseases. Many of these metabolic conditions clinically mimic rheumatologic conditions owing to non-specific arthralgia and back pain. Familiarity with subtle	**INT**	**JUL TO DEC**	**RADIOLOGY, RHEUMATOLOGY**	**PMID:**28685007 **PMCID:**5495117 **Impact Factor:** 0.900 **H-Index:** 11

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	radiographic findings of these conditions may lead to early diagnosis and treatment, resulting in improved patient outcomes.				
473.	Panwar, J., Sandhya, P., Kandagaddala, M., Nair, A., Jeyaseelan, V. and Danda, D. Utility of CT imaging in differentiating sacroiliitis associated with spondyloarthritis from gouty sacroiliitis: a retrospective study Clin Rheumatol; 2017, **Address:** Department of Radiology, **Christian Medical College, Vellore,** Tamil Nadu, India. drjyoticmch@gmail.com. Joint Department of Medical Imaging, University Health Network, University of Toronto, Toronto, ON, Canada. drjyoticmch@gmail.com. JDMI, Toronto General Hospital, Munk Building, 1 PMB-298, 585 University Avenue, Toronto, ON, M5G 2N2, Canada. drjyoticmch@gmail.com. Department of Clinical Immunology and Rheumatology, **Christian Medical College, Vellore,** Tamil Nadu, India. drsandhyap123@gmail.com. Department of Radiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Clinical Immunology and Rheumatology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India. Sacroiliitis is one of the criteria for classification as spondyloarthritis (SpA), though not unique to SpA. Other conditions including gout may be erroneously diagnosed as SpA due to sacroiliitis. The objective was to identify specific CT findings in sacroiliitis associated with SpA and gout. In this retrospective study, CT images of patients with sacroiliitis and clinical diagnosis of gout or SpA from 2010 to 2015 were independently reviewed by two radiologists, blinded to diagnosis. Axial and coronal oblique images were analyzed for characteristics of erosions. The receiver operator characteristic curve was constructed to analyze the discriminating ability of radiological findings. CT SI joint images of 11 patients with gout and 224 patients with SpA were re-analyzed. There was excellent agreement between the radiologists (ICC from 0.78 to 1). Erosions were more numerous in SpA. Erosions in gout were associated with tophi in 65.7% (73/111). Erosions in gout were para-articular and had sclerotic margins, overhanging edges, and multilobulated base (P < 0.0001 for all). Length and depth of erosions were more in gout as compared to SpA. AUCs for length, depth of erosions, and subchondral sclerosis were 0.665, 0.694, and 0.991, respectively. Subchondral sclerosis </= 4.5 mm had a sensitivity and specificity of 100 and 96%, respectively, for diagnosis of gout. In	**INT**	**JUL TO DEC**	**RADIOLOGY**	**PMID:**29119479 **Impact Factor:** 2.365 **H-Index:** 68

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	addition to known radiological features of gout, multilobulated base of erosions and absence of subchondral sclerosis could possibly distinguish sacroiliitis in SpA from gout. Our limited analysis suggests that CT imaging could help in differentiating the two.				
474.	Parker, E. P. K., Praharaj, I., John, J., Kaliappan, S. P., Kampmann, B., Kang, G. and Grassly, N. C. Changes in the intestinal microbiota following the administration of azithromycin in a randomised placebo-controlled trial among infants in south India Sci Rep; 2017, 7 (1): 9168 **Address:** Department of Infectious Disease Epidemiology, Imperial College London, London, UK. edward.parker@imperial.ac.uk. **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Paediatrics, Imperial College London, London, UK. MRC Unit The Gambia, Fajara, Gambia. Department of Infectious Disease Epidemiology, Imperial College London, London, UK. Macrolides are among the most widely prescribed antibiotics worldwide. However, their impact on the gut's bacterial microbiota remains uncertain. We characterised the intestinal microbiota in 6-11 month-old infants in India who received a 3-day course of azithromycin or placebo during a randomised trial of oral poliovirus vaccine immunogenicity (CTRI/2014/05/004588). In 60 infants per study arm, we sequenced the V4 region of the bacterial 16S rRNA gene in stool samples collected before and 12 days after finishing treatment. We also tested for the presence of common bacterial, viral, and eukaryotic enteropathogens in the same samples using real-time PCR in a Taqman array card (TAC) format. Azithromycin induced a modest decline in microbiota richness and a shift in taxonomic composition driven by a reduction in the relative abundance of Proteobacteria and Verrucomicrobia (specifically Akkermansia muciniphila). The former phylum includes pathogenic strains of Escherichia coli and Campylobacter spp. that declined in prevalence based on the TAC assay. These findings differ from previous observations among older children and adults in Europe and North America, suggesting that the effects of azithromycin on the bacterial microbiota may be specific to the age and geographic setting of its recipients.	**INT**	**JUL TO DEC**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28835659 **PMCID:**5569098 **Impact Factor:** 4.259 **H-Index:** 104

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
475.	Parker, E. P. K., Praharaj, I., Zekavati, A., Lazarus, R. P., Giri, S., Operario, D. J., Liu, J., Houpt, E., Iturriza-Gomara, M., Kampmann, B., John, J., Kang, G. and Grassly, N. C. Influence of the intestinal microbiota on the immunogenicity of oral rotavirus vaccine given to infants in south India Vaccine; 2018, 36 (2): 264-272 **Address:** Department of Infectious Disease Epidemiology, St Mary's Campus, Imperial College London, London, UK. Electronic address: edward.parker@imperial.ac.uk. Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India. Imperial BRC Genomics Facility, Commonwealth Building, Hammersmith Hospital, London, UK. Division of Infectious Diseases and International Health, University of Virginia, Charlottesville, VA, USA. Centre for Global Vaccine Research, Institute of Infection and Global Health, University of Liverpool, Liverpool, UK; NIHR Health Protection Research Unit in Gastrointestinal Infections, University of Liverpool, Liverpool, UK. Department of Paediatrics, St Mary's Campus, Imperial College London, London, UK; MRC Unit The Gambia, Fajara, Gambia. Department of Infectious Disease Epidemiology, St Mary's Campus, Imperial College London, London, UK. Oral rotavirus vaccines have consistently proven to be less immunogenic among infants in developing countries. Discrepancies in the intestinal microbiota, including a greater burden of enteropathogens and an altered commensal community composition, may contribute to this trend by inhibiting the replication of vaccine viruses. To test this possibility, we performed a nested case-control study in Vellore, India, in which we compared the intestinal microbiota of infants who responded serologically or not after two doses of Rotarix delivered at 6 and 10weeks of age as part of a clinical trial (CTRI/2012/05/002677). The prevalence of 40 bacterial, viral, and eukaryotic pathogen targets was assessed in pre-vaccination stool samples from 325 infants using singleplex real-time PCR on a Taqman array card (TAC). In a subset of 170 infants, we assessed bacterial microbiota composition by sequencing the 16S rRNA gene V4 region. Contrary to expectations, responders were more likely than non-responders to harbor >/=1	**INT**	**JUL TO DEC**	**GASTROINTESTINAL SCIENCES**	**PMID:**29217369 **Impact Factor:**3.235 **H-Index:** 151

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	bacterial enteropathogen at dose 1 (26% [40/156] vs 13% [21/157] of infants with TAC results who completed the study per protocol; chi(2), P=.006), although this was not apparent at dose 2 (24% [38/158] vs 23% [36/158]; P=.790). Rotavirus shedding after dose 1 was negatively correlated with the replication of co-administered oral poliovirus vaccine (OPV). We observed no consistent differences in composition or diversity of the 16S bacterial microbiota according to serological response, although rotavirus shedding was associated with slightly more bacterial taxa pre-vaccination. Overall, our findings demonstrate an inhibitory effect of co-administered OPV on the first dose of Rotarix, consistent with previous studies, but in the context of OPV co-administration we did not find a strong association between other components of the intestinal microbiota at the time of vaccination and Rotarix immunogenicity.				
476.	Pasangulapati, S. B., Murthy, T. V., Sivadasan, A., Gideon, L. R., Prabhakar, A. T., Sanjith, A., Mathew, V. and Alexander, M. The Prevalence and Severity of Autonomic Dysfunction in Chronic Inflammatory Demyelinating Polyneuropathy Ann Indian Acad Neurol; 2017, 20 (3): 274-277 **Address:** Department of Neurosciences, **Christian Medical College, Vellore,** Tamil Nadu, India. INTRODUCTION: In chronic inflammatory demyelinating polyneuropathy (CIDP), emphasis has been on motor disabilities, and autonomic dysfunction in these patients has not been addressed systematically. MATERIALS AND METHODS: Autonomic function was prospectively analyzed in 38 patients with CIDP. Quantitative autonomic function testing was done using Finometer((R)) PRO and severity of adrenergic and cardiovagal dysfunction graded according to composite autonomic severity score and sudomotor dysfunction assessed using sympathetic skin response. RESULTS: Thirty-four (89%) patients had features of autonomic dysfunction. Thirty-three (86%) patients had cardiovagal dysfunction, 21 (55%) had adrenergic dysfunction, and 24 (63%) had sudomotor dysfunction. Autonomic dysfunction was mild to moderate in the majority (86%). CONCLUSIONS: Autonomic dysfunction in CIDP is underreported and potentially amenable to therapy. Our cohort had a high proportion of adrenergic dysfunction compared to previous studies.	**NAT**	**JUL TO DEC**	**NEUROSCIENCES**	**PMID:**28904461 **PMCID:**5586124 **Impact Factor:** 0.950 **H-Index:** 17
477.	Pathrose, G., John, N. T. and Hariharan, P.	**NAT**	**JUL TO**	**UROLOGY,**	**PMID:**28892972

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Renal Synovial Sarcoma in a Young Pregnant Lady: A Case Report and Clinico-Pathological Profile J Clin Diagn Res; 2017, 11 (7): PD13-PD14 **Address:** Assistant Professor, Department of Urology, Mar Baselious Medical Mission, Ernakulam, Kerala, India. Professor, Department of Urology, **Christian Medical College, Vellore,** Tamil Nadu, India. Assistant Professor, Department of Pathology, **Christian Medical College, Vellore,** Tamil Nadu, India. Synovial sarcoma is a soft tissue neoplasm with clearly defined histologic, immunohistochemical and molecular features. These tumours usually arise in the extremities of young adults. Their occurrence in the kidney is extremely rare. A 25-year-old pregnant lady in her first trimester was incidentally found to have a left renal mass on perinatal ultrasonography. MRI showed a well encapsulated, heterointense mass replacing the left kidney. Following medical termination of her pregnancy, a radical nephrectomy was performed. Histopathology revealed a primary synovial cell sarcoma of the kidney. Postoperatively, she received ifosfamide based adjuvant chemotherapy. This report highlights the challenges involved in the diagnosis of this extremely rare neoplasm. A high index of clinical suspicion, complimented by the use of immunohistochemistry and cytogenetics during histopathological analysis aide in the diagnosis. Aggressive management with a combination of complete surgical extirpation and chemotherapy gives the best results.		**DEC**	**PATHOLOGY**	**PMCID:**5583885 **Impact Factor:**0.650 **H-Index:** 18
478.	Paul, A. and George, P. V. Left ventricular global longitudinal strain following revascularization in acute ST elevation myocardial infarction - A comparison of primary angioplasty and Streptokinase-based pharmacoinvasive strategy Indian Heart J; 2017, 69 (6): 695-699 **Address:** Department of Cardiology, **Christian Medical College vellore**, Tamilnadu 632004, India. Electronic address: look_lama@yahoo.co.in. Department of Cardiology, **Christian Medical College vellore**, Tamilnadu 632004, India. Electronic address: pvg@cmcvellore.ac.in.	**NAT**	**JUL TO DEC**	**CARDIOLOGY**	**PMID:**29174244 **PMCID:**5717277 **Impact Factor:**0.610 **H-Index:** 32

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	OBJECTIVE: Tenecteplase-based pharmacoinvasive percutaneous coronary intervention (PCI) has been shown to yield outcomes comparable to primary PCI in the setting of acute ST elevation myocardial infarction (STEMI). This study was designed to compare the efficacy of pharmacoinvasive PCI following successful thrombolysis with Streptokinase versus primary PCI in patients with STEMI. METHODOLOGY: We conducted a prospective single center observational study in 120 patients with STEMI who underwent primary PCI (n=60) and Streptokinase-based pharmacoinvasive PCI (n=60). Patients with Killips class 3 or 4 at presentation, and those with evidence of failed fibrinolysis were excluded. The primary outcome was LV systolic function after angioplasty, as assessed by 2D global longitudinal strain (GLS) using speckle tracking echocardiography (STE), as well as 2D LVEF using Simpson's biplane method. RESULTS: LV systolic function after PCI was significantly lower in the pharmacoinvasive arm as compared to the primary PCI arm, both by 2D STE (GLS: -9% vs -11%; p=0.03) and 2D Simpson's biplane method (LVEF: 40.7% vs 45.1%; p=0.02). TIMI flow in the culprit vessel prior to angioplasty was better in the pharmacoinvasive arm indicating successful thrombolysis, whereas post angioplasty flow was not different. There was no in-hospital mortality in either group. There was a trend toward increased incidence of acute kidney injury in the pharmacoinvasive arm. CONCLUSION: LV systolic function is significantly better after primary angioplasty as compared to pharmacoinvasive PCI following successful thrombolysis with Streptokinase.				
479.	Paul, A. P., Vedantam, A., Korula, G. and Chacko, A. G. A comparison of the recovery profiles of desflurane and isoflurane anesthesia in patients undergoing elective supratentorial craniotomy: A randomized controlled trial Neurol India; 2017, 65 (5): 1053-1058 **Address:** Department of Anaesthesia, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Neurosurgery, Baylor College of Medicine, Houston, Texas, USA. Department of Anaesthesia, Wayanad Institute of Medical Sciences, Kerala, India. CONTEXT: Few studies have compared recovery profiles of desflurane and isoflurane for patients undergoing elective supratentorial craniotomy. It is not known if the choice of inhalational agent can affect the duration of transient postoperative neurological deficits in these patients. AIMS: To compare the effect	**NAT**	**JUL TO DEC**	**ANAESTHESIA**	**PMID:**28879896 **Impact Factor:** 1.758 **H-Index:** 39

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	of desflurane and isoflurane on time-to-emergence and time-to-recovery of transient postoperative neurological deficits in patients undergoing supratentorial craniotomy. SETTINGS AND DESIGN: Prospective, double-blinded, randomized controlled trial at a tertiary care hospital. METHODS AND MATERIALS: We randomly assigned 60 patients to receive either desflurane or isoflurane during elective supratentorial craniotomy for intra-axial mass lesions. Time-to-emergence and time-to-recovery of transient postoperative neurological deficits were recorded and compared. STATISTICAL ANALYSIS USED: Parametric variables were compared by the Student's t test. Baseline data was compared using Pearson's chi square test, Fisher's exact test and two proportion Z test. RESULTS: There was a 35.7%, 31.4% and 34.5% reduction in median times to eye opening, obeying commands and orientation in the desflurane group (n=27) as compared to the isoflurane group (n=28). Five patients were enrolled but not included for analysis-Twelve patients sustained transient neurological deficits after surgery (desflurane, n=3; isoflurane, n=9). No significant difference in the time-to-recovery of transient postoperative neurological deficits was observed. CONCLUSIONS: Desflurane significantly reduced emergence times, and was able to facilitate an early neurological examination for patients. Additional studies are required to establish the impact of inhalational agents on transient postoperative neurological deficits.				
480.	Paul, B. Ravindran, Suman Babu, S. Ebenezer, Michael Raj, Winfred and Amalan, S. A preliminary study on the use of FX-Glycine gel and an in-house optical cone beam CT readout for IMRT and RapidArc verification Journal of Physics: Conference Series; 2017, 847 (1): 012003 **Address:**Medical Physics Division, Department of Radiation Oncology, **Christian Medical College, Vellore,** India The radiochromic FX gel with Optical CT readout has been investigated by several authors and has shown promising results for 3D dosimetry. One of the applications of the gel dosimeters is their use in 3D dose verification for IMRT and RapidArc quality assurance. Though polymer gel has been used successfully for clinical dose verification, the use of FX gel for clinical dose verification with optical cone beam CT needs further validation. In this work, we have used FX gel and an in- house optical readout system for gamma analysis between the dose matrices of measured dose distribution and a treatment planning system (TPS) calculated dose distribution for a few test cases.	**INT**	**JUL TO DEC**	**RADIATION ONCOLOGY**	**Impact Factor:**0.54
481.	Pavan Kumar, D. V., Mohan, J., Rakesh, P. S., Prasad, J. and Joseph, L.	**NAT**	**JUL TO**	**PEDIATRICS,**	**PMID:29564254**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Bacteriological profile of neonatal sepsis in a secondary care hospital in rural Tamil Nadu, Southern India J Family Med Prim Care; 2017, 6 (4): 735-738 Address: Department of Pediatrics, Christian Fellowship Hospital, Dindigul, Tamil Nadu, India. Department of Pediatrics, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Community Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Introduction: Neonatal sepsis is a leading cause of neonatal mortality and morbidity in the world. The objective of the current study was to detect the common causative microorganisms of neonatal sepsis and their antimicrobial resistance patterns in a rural secondary hospital in Tamil Nadu, India. Materials and Methods: Neonates (0-28 days) admitted to this newborn care unit from October 2013 to September 2015, with a diagnosis of probable sepsis were studied. All the enrolled babies had blood cultures taken and were followed up till final outcome, which was discharge or death, irrespective of culture result. Univariate analysis was performed for factors associated with culture positivity, generating odds ratios, and confidence intervals. Results: Among the 107 babies with a diagnosis of probable sepsis, 28 (26.2%) had shown bacteria in culture. The majority (94.4%) were of early-onset sepsis. The predominant organisms were Staphylococcus aureus (10/28) and Klebsiella (6/28). 100% of Gram-negative bacilli and 90% of Staphylococcus were resistant to Ampicillin. Gentamicin resistance among Gram-negative bacilli and Staphylococcus was 52.9% and 20%, respectively, while third-generation cephalosporin resistance was 31.2% and 20%, respectively. Among the neonates diagnosed as probable sepsis, idiopathic prematurity (P = 0.007) was found to have a statistically significant association with culture-positive sepsis. Conclusion: The culture positivity rate among the neonates with probable sepsis in the current study was 26%. An alarmingly high degree of antibiotic resistance observed calls for robust infection control practices and an urgent evaluation and development of individual and national antibiotic policies for neonatal sepsis.		**DEC**	**COMMUNITY MEDICINE,**	**PMC ID:5848389** **Impact Factor:** 0.670 **H-Index:** NA
482.	Peedicayil, J. The role of epigenetics in social psychiatry Int J Soc Psychiatry; 2017, 63 (1): 14-20 **Address:** Department of Pharmacology and Clinical Pharmacology, **Christian Medical College vellore**, Vellore, India. **BACKGROUND:** Epigenetics refers to the study of heritable changes in gene expression not involving changes in DNA sequence and is presently an active area	**INT**	**JAN TO JUN**	**PHARMACOLOGY AND CLINICAL PHARMACOLOGY**	**PMID:**27856950 **Impact Factor:** 1.380 **H-Index:** 49

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	of research in biology and medicine. There is increasing evidence that epigenetics is involved in the pathogenesis of psychiatric disorders. AIMS AND **METHODS:** Several studies conducted to date have suggested that psychosocial factors act by modifying epigenetic mechanisms of gene expression in the brain in the pathogenesis of psychiatric disorders. Such studies have been conducted both on brain tissues and also using peripheral tissues as substitutes for brain tissues. This article reviews such studies. **RESULTS AND CONCLUSION:** Epigenetic mechanisms of gene expression in the brain appear to link one individual with another in the context of social psychiatry. Epigenetics appears to be of major importance to the field of social psychiatry.				
483.	Peedicayil, J. Epigenetics and developmental psychiatry Int J Soc Psychiatry; 2017, 63 (4): 378 **Address:** Department of Pharmacology and Clinical Pharmacology, **Christian Medical College, Vellore,** Vellore, India.	**INT**	**JAN TO JUN**	**PHARMACOLOGY AND CLINICAL PHARMACOLOGY**	**PMID:**28504044 **Impact Factor:** 1.380 **H-Index:** 49
484.	Pekkinen, M., Grigelioniene, G., Akin, L., Shah, K., Karaer, K., Kurtoglu, S., Ekbote, A., Aycan, Z., Sagsak, E., Danda, S., Astrom, E. and Makitie, O. Novel mutations in the LRP5 gene in patients with Osteoporosis-pseudoglioma syndrome Am J Med Genet A; 2017, 173 (12): 3132-3135 **Address:** Folkhalsan Institute of Genetics, Biomedicum Helsinki, University of Helsinki, Helsinki, Finland. Children's Hospital, University of Helsinki and Helsinki University Hospital, Helsinki, Finland. Center for Molecular Medicine, Karolinska Institutet and Clinical Genetics, Karolinska University Hospital, Stockholm, Sweden. Erciyes University, Faculty of Medicine, Department of Pediatric Endocrinology, Turkey. Department of Clinical Genetics, **Christian Medical College and Hospital** Vellore, India. Intergen, Genetic Diagnosis Research and Application Center, Ankara, Turkey. Dr.Sami Ulus Children's Hospital, Department of Pediatric Endocrinology, Ankara, Turkey.	**INT**	**JUL TO DEC**	**CLINICAL GENETICS**	**PMID:**29055141 **Impact Factor:** 2.259 **H-Index:** 70

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Woman and Child Health, Karolinska Institutet and Pediatric Neurology, Astrid Lindgren Children's Hospital at Karolinska University Hospital, Stockholm, Sweden.				
485.	Periyasamy, A. J., Mahasampath, G., Karthikeyan, M., Mangalaraj, A. M., Kunjummen, A. T. and Kamath, M. S. Does duration of abstinence affect the live-birth rate after assisted reproductive technology? A retrospective analysis of 1,030 cycles Fertil Steril; 2017, 108 (6): 988-992 **Address:** Reproductive Medicine Unit, **Christian Medical College Hospital, Vellore,** India. Department of Biostatistics, Reproductive Medicine Unit, **Christian Medical College Hospital, Vellore,** India. Reproductive Medicine Unit, **Christian Medical College Hospital, Vellore,** India. Electronic address: dockamz@gmail.com. OBJECTIVE: To study influence of abstinence period on the live-birth rate after assisted reproductive technology (ART). DESIGN: Retrospective cohort study. SETTING: Reproductive medicine unit, university-level hospital. PATIENT(S): A total 1,030 ART cycles evaluated from 2011 to 2015. INTERVENTION(S): Group I, abstinence period 2-7 days, and group II, abstinence period >7 days, were compared. Two subgroups Ia (2-4 days) and Ib (5-7 days) were also compared with group II. MAIN OUTCOME MEASURE(S): Primary outcome was live birth per ET. Secondary outcomes included implantation, clinical pregnancy, and miscarriage rates. RESULT(S): The live-birth rate (34.1 % vs. 24.1%; odds ratio [OR], 1.6; 95% confidence interval [CI], 1.1-2.4), clinical pregnancy rate (44.4 % vs. 32.7%; OR, 1.6; 95% CI, 1.1-2.3), and implantation rate (26.4% vs. 18.2%) were significantly higher in group I compared with group II. Other secondary outcomes of fertilization rate and miscarriage rate did not differ between groups I and II. The adjusted odds ratio (aOR) for live birth (aOR, 1.6; 95% CI, 1.1-2.5) and clinical pregnancy rates (aOR, 1.7; 95% CI, 1.2-2.5) were significantly higher for group I compared with group II. The live-birth rate was significantly higher in group Ia (36.1% vs. 24.1%) compared with group II. CONCLUSION(S): An abstinence period of more than 7 days may impact ART outcomes adversely when compared with an abstinence period of 2-7 days.	**INT**	**JUL TO DEC**	**REPRODUCTIVE MEDICINE UNIT, BIOSTATISTICS**	**PMID:**29100624 **Impact Factor:** 4.373 **H-Index:** 172

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
486.	Philip, S. S. Setting up of a cerebral visual impairment clinic for children: Challenges and future developments Indian J Ophthalmol; 2017, 65 (1): 30-34 **Address:** Department of Ophthalmology, Cerebral Visual Impairment Clinic, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. **AIM:** The aim of this study is to describe the setting up of a cerebral visual impairment (CVI) clinic in a tertiary care hospital in South India and to describe the spectrum of cases seen. **MATERIALS AND METHODS:** The CVI clinic, set up in February 2011, receives interdisciplinary input from a core team involving a pediatrician, neurologist, psychiatrist, occupational therapist, pediatric ophthalmologist, and an optometrist. All children, <18 years of age, with cerebral palsy (CP), learning disability, autism, neurodegenerative diseases, and brain trauma are referred to the clinic for functional vision assessment and opinion for further management. **RESULTS:** One thousand four hundred and seventy-eight patients were seen in the CVI clinic from February 2011 to September 2015. Eighty-five percent of the patients were from different parts of India. In the clinic, 61% had CP, 28% had seizure disorders, autism was seen in 9.5%, and learning disability, neurodegenerative conditions, and brain injury together constituted 1.5%. Most of the children (45%) had moderate CP. Forty percent of CVI was due to birth asphyxia, but about 20% did not have any known cause for CVI. Seventy percent of patients, who came back for follow-up, were carrying out the habilitation strategies suggested. **CONCLUSIONS:** Average attendance of over 300 new patients a year suggests a definite need for CVI clinics in the country. These children need specialized care to handle their complex needs. Although difficult to coordinate, an interdisciplinary team including the support groups and voluntary organizations is needed to facilitate the successful implementation of such specialized service.	**NAT**	**JAN TO JUN**	**OPHTHALMOLOGY**	**PMID:**28300737 **Impact Factor:** 0.835 **H-Index:** 39
487.	Philip, S. S. Comment on: Visual function of children with visual and other disabilities in Oman: A case series Indian J Ophthalmol; 2017, 65 (7): 640-641	**NAT**	**JUL TO DEC**	**OPHTHALMOLOGY**	**PMID:**28724833 **PMCID:**5549428 **Impact Factor:** 0.835 **H-Index:** 39

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Department of Ophthalmology, The Cerebral Visual Impairment Clinic, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India				
488.	Philip, S. S., Kuriakose, T. and Chacko, G. Successful surgical management of bilateral epiretinal membrane in a child with only cafe-au-lait spots Indian J Ophthalmol; 2017, 65 (6): 531-533 **Address:** Department of Ophthalmology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, South India. Department of Pathology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, South India. A 6-year-old boy diagnosed as anisometropic amblyopia, with only cafe-au-lait spots and a family history of neurofibromatosis, presented with decrease in vision in the both eyes. Dilated fundus examination showed epiretinal membrane in both eyes over the macula. He underwent successful surgical management of the epiretinal membrane.	**NAT**	**JAN TO JUN**	**OPHTHALMOLOGY, PATHOLOGY**	**PMID:**28643724 **Impact Factor:** 0.835 **H-Index:** 39
489.	Phukan, C., Abrol, N., Kumar, R. M. and Devasia, A. Squamous cell carcinoma of the scrotum: the revisit of a rare disease ANZ J Surg; 2017, 87 (10): E161-E162 **Address:** Department of Urology, **Christian Medical College, Vellore,** India. Department of Pathology, **Christian Medical College, Vellore,** India.	**INT**	**JUL TO DEC**	**UROLOGY, PATHOLOGY**	**PMID:**25766760 **Impact Factor:** 1.513 **H-Index:** 64
490.	Phukan, C., George, A. J. P., Chandrasingh, J. and Devasia, A. Surgical revascularization of bilateral renal artery stenosis due to fibromuscular dysplasia Urol Ann; 2017, 9 (2): 188-191 **Address:** Department of Urology, **Christian Medical College, Vellore,** Tamil Nadu, India. Fibromuscular dysplasia (FMD) is a noninflammatory disease affecting small- and	**INT**	**JAN TO JUN**	**UROLOGY**	**PMID:**28479775 **Impact Factor:** 0.510 **H-Index:** 12

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	medium-sized arteries of the renal and the carotids. It affects the renal arteries in nearly 60%-75% cases. The primary clinical manifestation of renal FMD is hypertension. Medial fibroplasia represents the most common dysplastic lesion. We report two cases who presented with hypertension and renal insufficiency and on evaluation was found to have bilateral renal artery stenosis. Stenting of the renal vessels was not possible due to the narrowed caliber of the vessel and inability to cannulate the renal arteries. They underwent renal artery revascularization with a splenorenal end to end anastomosis. The renal parameters and blood pressure of both the patients stabilized subsequently. Renal revascularization can be a good option for patient having failed angioplasty with stenting.				
491.	Phukan, C., Nirmal, T. J., Wann, C. V., Chandrasingh, J., Kumar, S., Kekre, N. S. and Devasia, A. Can we predict the need for intervention in steinstrasse following shock wave lithotripsy? Urol Ann; 2017, 9 (1): 51-54 **Address:** Department of Urology, **Christian Medical College, Vellore,** Tamil Nadu, India. **INTRODUCTION:** Steinstrasse (SS) is a known complication of shock wave lithotripsy (SWL). Although the majority of SS clears spontaneously, about 6% require intervention. This study was carried out to identify the factors that determine the need for intervention in SS. **MATERIALS AND METHODS:** This was a retrospective study of all patients who developed steinstrasse following SWL at our center. They were divided into two groups: a) Those cleared spontaneously and b) Those required intervention. The two groups were compared with regard to demographic profile, stone factors and factors related to steinstrasse. **RESULTS:**Out of 2436 cases of SWL, 89 (3%) formed steinstrasse. The majority of the patients (35%) who required intervention had stone sizes of 10-14 mm. Coptcoat type III steinstrasse required significantly more interventions for clearance (P = 0.001). The site and the size of the SS was not a predictor of intervention for SS. **CONCLUSIONS:** Early intervention is warranted in patients with steinstrasse where the lead fragment is >5 mm (Coptcoat type III).	**INT**	**JAN TO JUN**	**UROLOGY**	**PMID:**28216930 **Impact Factor:** 0.510 **H-Index:** 12
492.	Ponmalar, J., Benjamin, S. J., Abraham, A., Rathore, S., Jeyaseelan, V. and Mathews, J. E.	**INT**	**JAN TO JUN**	**OBSTETRICS AND**	**PMID:**27566696 **Impact Factor:**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Randomized double-blind placebo controlled study of preinduction cervical priming with 25 microg of misoprostol in the outpatient setting to prevent formal induction of labour Arch Gynecol Obstet; 2017, 295 (1): 33-38 **Address:** Department of Obstetrics and Gynaecology Unit V, **Christian Medical College,** Ida Scudder Road, Vellore, 632 004, India. Department of Biostatistics, **Christian Medical College,** Ida Scudder Road, Vellore, 632 004, India. Department of Obstetrics and Gynaecology Unit V, **Christian Medical College,** Ida Scudder Road, Vellore, 632 004, India. coronistrial@yahoo.co.in **OBJECTIVE:** To compare the efficacy of preinduction outpatient use of a single dose of 25 mug vaginal misoprostol between 381/2 and 40 weeks with that of placebo, to decrease the interval from intervention to delivery after stretch and sweep in low-risk gravid women with Bishop's score <4. **METHOD:** Sixty three women received 25 mug vaginal misoprostol and 63 women received placebo after stretch and sweep. **RESULTS:** The duration from intervention to delivery was 3.35 (1.12-9.46) days in the misoprostol group and 5.42 (2.39-10.11) days in the placebo group which was statistically significant (p = 0.029). Spontaneous labor was seen in 39 women (61.9 %) in the misoprostol group and 35 women (55.6 %) in the placebo group (p = 0.531). Eight women in the misoprostol group and 18 in the placebo group had Lower Segment Caesarean Section (LSCS) and this difference was also statistically significant (p = 0.027). There were no major maternal and neonatal complications in both groups. **CONCLUSION:** Preinduction use of 25 mug vaginal misoprostol after stretch and sweep in the outpatient setting decreased the intervention to delivery interval when compared to placebo.			**GYNAECOLOGY UNIT V, OF BIOSTATISTICS**	2.090 **H-Index:** 52
493.	Ponmalar, R., Manickam, R., Ganesh, K. M., Saminathan, S., Raman, A. and Godson, H. F. Dosimetric characterization of optically stimulated luminescence dosimeter with therapeutic photon beams for use in clinical radiotherapy measurements J Cancer Res Ther; 2017, 13 (2): 304-312 **Address:** Department of Radiation Physics, Kidwai Memorial Institute of Oncology,	**INT**	**JAN TO JUN**	**RADIOTHERAPY**	**PMID:**28643752 **Impact Factor:** 0.750 **H-Index:** 25

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Bengaluru, Karnataka; Department of Radiotherapy, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Radiation Physics, Kidwai Memorial Institute of Oncology, Bengaluru, Karnataka, India. **AIM:** The modern radiotherapy techniques impose new challenges for dosimetry systems with high precision and accuracy in in vivo and in phantom dosimetric measurements. The knowledge of the basic characterization of a dosimetric system before patient dose verification is crucial. This incites the investigation of the potential use of nanoDot optically stimulated luminescence dosimeter (OSLD) for application in radiotherapy with therapeutic photon beams. **MATERIALS AND METHODS:** Measurements were carried out with nanoDot OSLDs to evaluate the dosimetric characteristics such as dose linearity, dependency on field size, dose rate, energy and source-to-surface distance (SSD), reproducibility, fading effect, reader stability, and signal depletion per read out with cobalt-60 (60 Co) beam, 6 and 18 MV therapeutic photon beams. The data acquired with OSLDs were validated with ionization chamber data where applicable. **RESULTS:** Good dose linearity was observed for doses up to 300 cGy and above which supralinear behavior. The standard uncertainty with field size observed was 1.10% +/- 0.4%, 1.09% +/- 0.34%, and 1.2% +/- 0.26% for 6 MV, 18 MV, and 60 Co beam, respectively. The maximum difference with dose rate was 1.3% +/- 0.4% for 6 MV and 1.4% +/- 0.4% for 18 MV photon beams. The largest variation in SSD was 1.5% +/- 1.2% for 60 Co, 1.5% +/- 0.9% for 6 MV, and 1.5% +/- 1.3% for 18 MV photon beams. The energy dependence of OSL response at 18 MV and 60 Co with 6 MV beam was 1.5% +/- 0.7% and 1.7% +/- 0.6%, respectively. In addition, good reproducibility, stability after the decay of transient signal, and predictable fading were observed. **CONCLUSION:** The results obtained in this study indicate the efficacy and suitability of nanoDot OSLD for dosimetric measurements in clinical radiotherapy.				
494.	Ponmalar, Y. R., Manickam, R., Sathiyan, S., Ganesh, K. M., Arun, R. and Godson, H. F. Response of Nanodot Optically Stimulated Luminescence Dosimeters to Therapeutic Electron Beams J Med Phys; 2017, 42 (1): 42-47	**INT**	**JAN TO JUN**	**RADIOTHERAPY**	**PMID:**28405107 **Impact Factor:** 0.980 **H-Index:** 16

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Department of Radiation Physics, Kidwai Memorial Institute of Oncology, Bengaluru, Karnataka, India; Department of Radiotherapy, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Radiation Physics, Kidwai Memorial Institute of Oncology, Bengaluru, Karnataka, India. Response of Al2O3:C-based nanoDot optically stimulated luminescence (OSL) dosimeter was studied for the dosimetry of 6, 9, 12, 16, and 20 MeV therapeutic electron beams. With reference to ionization chamber, no change in the response was observed with the change in the energy of electron beams for the field size from 6 cm x 6 cm to 25 cm x 25 cm, dose rates from 100 MU/min to 600 MU/min, and the linearity in the response up to 300 cGy. The fading of the transient signal was higher for 20 MeV electron beam than that of 6 MeV electron beam by about 5% as compared to value at 20 min after irradiation. The depletion of OSL signal per readout in 200 successive readouts was also found to change with dose and energy of electron beam from 6 MeV (9% and 12% per readout at 2 and 10 Gy, respectively) to 20 MeV (9% and 16% at 2 and 10 Gy, respectively). The OSL sensitivity changed in the range from 2% to 6% with accumulated doses from 2 to 8 Gy and with electron energy from 6 to 20 MeV, but the sensitivity could be reset using an optical annealing treatment. Although negligible fading for postirradiation storage from 20 min to several months, acceptable precision and linearity in the desired range, and high reproducibility makes nanoDot dosimeters very attractive for the dosimetry of therapeutic electron beams, a note should be made for changes in sensitivity at doses beyond 2 Gy and electron beams energy dependence in reuse, short-term fading, and signal depletion on repeated readout.				
495.	Ponraj, L., Mishra, A. K., Koshy, M. and Carey, R. A. B. A rare case report of Strychnos nux-vomica poisoning with bradycardia J Family Med Prim Care; 2017, 6 (3): 663-665 doi: 10.4103/2249-4863.222036. **Address:** Department of Internal Medicine, **Christian Medical College Hospital, Vellore**, Tamil Nadu, India. Strychnine poisoning is a rare method of deliberate self-harm in adults. Poisoning with strychnine leaves is a rare form of strychnine poisoning, as the usual plant parts used are nuts, bark, and seeds. Although the common cardiac manifestations of strychnine positioning include tachycardia and hypertension, we report a patient with mild strychnine poisoning with bradycardia.	**NAT**	**JUL TO DEC**	**MEDICINE UNIT IV**	**PMID:**29417029 **PMC ID:**5787976 **Impact Factor:** 0.670 **H-Index:** NA

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
496.	**Poonnoose, P**., Carneiro, J. D. A., Cruickshank, A. L., El Ekiaby, M., Perez Bianco, R. P., Ozelo, M. C., De Bosch, N., Baghaipour, M., Tien, S. L., Chuansumrit, A., D'amico, E. A., Van Zyl, A., Sabour, A., Candela, M., Ricciardi, J. B. S., Ruiz-Saez, A., Ravanbod, R., Lam, J. C. L., Jaovisidha, S., Kavitha, M. L., **Gibikote, S**., **Shyamkumar, N**. and **Srivastava, A.** Episodic replacement of clotting factor concentrates does not prevent bleeding or musculoskeletal damage - the MUSFIH study Haemophilia; 2017, 23 (4): 538-546 **Address: Christian Medical College, Vellore,** India. Hospital das Clinicas da Faculdade de Medicina USP, Sao Paulo, Brazil. Groote Schuur Hospital, Capetown, South Africa. Shabrawishi Hospital, Cairo, Egypt. Instituto de Investigaciones Hematologicas, National Academy of Medicine, Buenos Aires, Argentina. INCT do Sangue Hemocentro UNICAMP, University of Campinas, Campinas, SP, Brazil. Banco Municipal de Sangre, Caracas, Venezuela. Comprehensice Haemophilia Care Centre, Teheran, Iran. Singapore General Hospital, Singapore, Singapore. Ramathibodi Hospital, Bangkok, Thailand. Stellenbosch University and Tygerberg Hospital, Capetown, South Africa. Tarbiat Modares University, Tehran, Iran. KK Women's and Children's Hospital, Singapore, Singapore. **PATIENTS ANDMETHODS:** A longitudinal study was carried out in 255 children from 10 centres in nine developing countries over 5 years to assess the musculoskeletal outcome of children on episodic factor replacement. Outcome was documented by assessment of the annual joint bleeding rate (AJBR), WFH clinical and Pettersson radiological joint scores as well as the FISH score for activities. Of the 203 patients for whom data was available at the end of 5 years, 164 who had received only episodic treatment are included in this report. **RESULTS:** The median age at the beginning of the study was 10 years (IQR 7-12). The median clotting factor concentrate (CFC) usage was 662 IU kg-1 year-1 (IQ range: 280-1437). The median AJBR was 10 (IQ range: 5-17). The median AJBR was higher in the older children with the median being 5 for the 5 year old child, while it was 9 for the 10 year old and 11 for children older than 15. Given the episodic nature of the replacement therapy, those with a higher AJBR used significantly greater annual	**INT**	**JAN TO JUN**	**RADIOLOGY, HAEMATOLOGY**	**PMID:**28574179 **WOS:**000405873900037 **Impact Factor:** 3.569 **H-Index:** 79

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	CFC doses (P < 0.001); The median change in WFH clinical score and Pettersson radiological score over the 5 years was 0.4/year for each, while the FISH deteriorated at a rate of 0.2/year with poor correlation of these changes with CFC dose. WFH and FISH scores were significantly worse in those with an AJBR of >3 per year (P = 0.001). The change in the Pettersson score was significantly more in those with an AJBR of >5 per year (P = 0.020). Significant changes in FISH scores were only noted after 10 years of age. **CONCLUSION:** Episodic CFC replacement over a large range of doses does not alter the natural course of bleeding in haemophilia or the musculoskeletal deterioration and should not be recommended as a long term option for treatment. Prophylaxis is the only way to preserve musculoskeletal function in haemophilia.				
497.	Prabhakaran, V., Drevets, D. A., Ramajayam, G., Manoj, J. J., Anderson, M. P., Hanas, J. S., Rajshekhar, V., Oommen, A. and Carabin, H. Comparison of monocyte gene expression among patients with neurocysticercosis-associated epilepsy, Idiopathic Epilepsy and idiopathic headaches in India PLoS Negl Trop Dis; 2017, 11 (6): e0005664 **Address:** Department of Neurological Sciences, **Christian Medical College, Vellore,** India. Dept. of Internal Medicine, University of Oklahoma HSC, and the VA Medical Center, Oklahoma City, United States of America. Dept. of Biostatistics and Epidemiology, University of Oklahoma HSC, Oklahoma City, United States of America. Dept. of Biochemistry and Dept. of Surgery, University of Oklahoma HSC, Oklahoma City, United States of America. **BACKGROUND:** Neurocysticercosis (NCC), a neglected tropical disease, inflicts substantial health and economic costs on people living in endemic areas such as India. Nevertheless, accurate diagnosis using brain imaging remains poorly accessible and too costly in endemic countries. The goal of this study was to test if blood monocyte gene expression could distinguish patients with NCC-associated epilepsy, from NCC-negative imaging lesion-free patients presenting with idiopathic epilepsy or idiopathic headaches. METHODS/PRINCIPAL FINDINGS: Patients aged 18 to 51 were recruited from the Department of Neurological Sciences, **Christian Medical College and Hospital, Vellore**, India, between January 2013 and October 2014. mRNA from CD14+ blood monocytes was isolated from 76 patients with	**INT**	**JAN TO JUN**	**NEUROLOGICAL SCIENCES**	**PMID:**28622332 **Impact Factor:** 3.834 **H-Index:** 87

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	NCC, 10 Recovered NCC (RNCC), 29 idiopathic epilepsy and 17 idiopathic headaches patients. A preliminary microarray analysis was performed on six NCC, six idiopathic epilepsy and four idiopathic headaches patients to identify genes differentially expressed in NCC-associated epilepsy compared with other groups. This analysis identified 1411 upregulated and 733 downregulated genes in patients with NCC compared to Idiopathic Epilepsy. Fifteen genes up-regulated in NCC patients compared with other groups were selected based on possible relevance to NCC, and analyzed by qPCR in all patients' samples. Differential gene expression among patients was assessed using linear regression models. qPCR analysis of 15 selected genes showed generally higher gene expression among NCC patients, followed by RNCC, idiopathic headaches and Idiopathic Epilepsy. Gene expression was also generally higher among NCC patients with single cyst granulomas, followed by mixed lesions and single calcifications. CONCLUSIONS/SIGNIFICANCE: Expression of certain genes in blood monocytes can distinguish patients with NCC-related epilepsy from patients with active Idiopathic Epilepsy and idiopathic headaches. These findings are significant because they may lead to the development of new tools to screen for and monitor NCC patients without brain imaging.				
498.	Pradipkumar, D., Gautham, A., Gupta, R., James, P., Thangakunam, B. and Christopher, D. J. Familial interstitial pulmonary fibrosis in two different families in India: A case series Lung India; 2017, 34 (5): 475-479 **Address:** Department of Pulmonary Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Medical Genetics, **Christian Medical College, Vellore,** Tamil Nadu, India. INTRODUCTION: Idiopathic pulmonary fibrosis (IPF), a chronic progressive interstitial lung disease (ILD), Occasionally, IPF occurs in families. Familial interstitial lung disease has been reported worldwide, limited information is available on the disease among Indian patients. CASE PRESENTATION: A 59-year-old woman presented with a 2-year history of progressive dyspnoea. Based on clinical and radiological features, our patient was diagnosed with idiopathic pulmonary fibrosis. Several family members of her first and second generations had died from respiratory failure. Her sister also diagnosed as IPF based on typical	**NAT**	**JUL TO DEC**	**PULMONARY MEDICINE, MEDICAL GENETICS**	**PMID:**28869238 **PMCID:**5592765 **Impact Factor:** 0.530 **H-Index:** 14

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	High resolution computed tomography (HRCT) finding though she was asymptomatic and came for screening. In addition, another male patient also had similar history and diagnosed as familial IPF based on HRCT and genetic testing in spite of significant occupational exposure. Genetic study revealed SFTPA1 gene was associated with susceptibility to idiopathic pulmonary fibrosis. CONCLUSION: Our report illustrates that asymptomatic screening of family member can uncover such a serious disease in patients with familial interstitial fibrosis. Otherwise, clinical, radiological, and histological features are indistinguishable from those of sporadic cases. Furthermore, our work highlights the importance of compiling a thorough family history in individuals presenting with cough and dyspnoea, particularly in younger patients identified with idiopathic pulmonary fibrosis.				
499.	Pragasam, A. K., Shankar, C., Veeraraghavan, B., Biswas, I., Nabarro, L. E., Inbanathan, F. Y., George, B. and Verghese, S. Molecular Mechanisms of Colistin Resistance in Klebsiella pneumoniae Causing Bacteremia from India-A First Report Front Microbiol; 2016, 7 2135 **Address:** Department of Clinical Microbiology, **Christian Medical College vellore**, India. Department of Microbiology, Molecular Genetics and Immunology, University of Kansas Medical Centre Kansas, KS, USA. Department of Haematology, **Christian Medical College vellore**, India. Department of Nephrology, **Christian Medical College vellore**, India. Colistin has long been a reserve drug used for the treatment of carbapenem resistant Klebsiella pneumoniae. Carbapenem resistance in K. pneumoniae has been increasing and is as high as 44% in India. Although a reserve agent, with rise in rates of resistance to carbapenems, the usage of colistin has increased over the years leading to slow emergence of resistance. Colistin resistance is mainly mediated by the alteration in the LPS of bacterial outer membrane with the addition of L-Ara4-N and PEtN molecules. These alterations are mediated by mutations in several genes involved in lipidA modifications and most commonly mutations in mgrB gene has been reported. Recently there is emergence of plasmid mediated resistance due to mcr-1 and mcr-2 genes which poses a threat for the rapid global spread. This study aims at characterizing eight colistin resistant	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY, HAEMATOLOGY, NEPHROLOGY**	**PMID:**28119670 **Impact Factor:** 4.076 **H-Index:** 59

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	K. pneumoniae from bacteremia by whole genome sequencing. Eight K. pneumoniae were isolated from blood culture during 2013 and 2014 at the Department of Clinical Microbiology, **Christian Medical College,** India. Antimicrobial susceptibility testing was performed and minimum inhibitory concentration (MIC) was determined for colistin and polymyxin B by broth-micro dilution method. Whole genome sequencing was performed using Ion Torrent and the genome of all eight isolates was analyzed. The eight isolates were resistant to all the antimicrobials expect tigecycline. MIC of colistin and polymyxin B were ranged from 4 to 1024 mug/ml and 0.5 to 2048 mug/ml respectively. Multiple mutations were observed in the chromosomal genes involved in lipid A modifications. mcr-1 and mcr-2 gene was absent in all the isolates. The most significant were mutations in mgrB gene. Among the eight isolates, four, three and one were belonged to sequence types ST 231, ST14 and ST147 respectively. Seven isolates had blaOXA-48 like, one co-expressed blaNDM-1 and blaOXA-48 like genes leading to carbapenem resistance. Overall, multiple numbers of alterations have been observed. This includes silent mutations, point mutations, insertions and/or deletions. Mutations in mgrB gene is responsible for resistance to colistin in this study. Due to emergence of resistance to reserve drugs, there is a need for combination therapies for carbapenem resistant K. pneumoniae and colistin must be judiciously used.				
500.	Pragasam, A. K., Veeraraghavan, B., Bakthavatchalam, Y. D., Gopi, R. and Aslam, R. F. Strengths and limitations of various screening methods for carbapenem-resistant Enterobacteriaceae including new method recommended by clinical and laboratory standards institute, 2017: A tertiary care experience Indian J Med Microbiol; 2017, 35 (1): 116-119 **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Carbapenemase-mediated carbapenem resistance is a major concern across the world. Rapid detection of carbapenemase-producing organisms is of great importance in clinical settings. However, it is essential to have a test with good sensitivity and specificity. The aim of the study was to compare the performance of RAPIDEC(R) CARBA NP and modified carbapenem inactivation method (mCIM)	**NAT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY**	**PMID:**28303831 **Impact Factor:** 1.149 **H-Index:** 38

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	recommended by Clinical and Laboratory Standards Institute guideline 2017. A total of ninety carbapenem resistant Escherichia coli and Klebsiella pneumoniae have been tested. The presence of various carbapenemases was screened by conventional multiplex polymerase chain reaction. RAPIDEC(R) CARBA NP detected 90%, whereas mCIM detected 99% of the study isolates tested. Although RAPIDEC(R) CARBA NP is a rapid test, the sensitivity is reduced for blaOxa-48Likedetection; while mCIM could pick up blaOxa-48Likeenzymes with excellent sensitivity. Further, organisms producing low carbapenemase activity enzymes, thickness of the inoculum and the disc potency are likely to influence the test results of mCIM with an overnight delay.				
501.	Pragasam, Agila Kumari, Shankar, Chaitra, Anandan, Shalini, Verghese, Valsan Philip and Veeraraghavan, Balaji Alarming increase in carbapenemase-producing Klebsiella spp causing bloodstream infections in pediatric population in India Journal of Infection in Developing Countries; 2017, 11 (9): 736-737	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY**	**WOS:**000416068600010 **Impact Factor:** 1.353 **H-Index:** 35
502.	Praharaj, I., Revathy, R., Bandyopadhyay, R., Benny, B., Azharuddin Ko, M., Liu, J., Houpt, E. R. and Kang, G. Enteropathogens and Gut Inflammation in Asymptomatic Infants and Children in Different Environments in Southern India Am J Trop Med Hyg; 2017, **Address:** Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. Division of Infectious Diseases and International Health, University of Virginia, Charlottesville, Virginia. Children in poor environmental conditions are exposed early and often to enteric pathogens, but within developing countries, heterogeneity in enteropathogen exposure in different settings and communities is rarely addressed. We tested fecal samples from healthy infants and children from two different environments in the same Indian town for gut enteropathogens and biomarkers of gut inflammation. A significantly higher proportion of infants and children from a poor semi-urban neighborhood (93%) had one or more enteropathogens than those from a medical college campus (71.7%). Infants and children from the poor neighborhood had an average of 3.3 (95% confidence interval [CI]: 2.9-3.7) enteropathogens compared with an average of 1.4 (95% CI: 1.0-1.7) enteropathogens in campus infants/children. Viral and bacterial infections, including enteroviruses,	**INT**	**JUL TO DEC**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**29231154 **Impact Factor:**2.549 **H-Index:** 126

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	adenoviruses, Campylobacter spp., and diarrhegenic Escherichia coli were more common and fecal biomarkers of inflammation were higher in the poor neighborhood. The findings demonstrate significant difference in the asymptomatic carriage of gut enteropathogens and gut inflammatory biomarkers in infants and children from two different environments within the same town in south India.				
503.	Praharaj, I., Sarkar, R., Rao Ajjampur, S. S., Roy, S. and Kang, G. Temporal trends of intestinal parasites in patients attending a tertiary care hospital in south India: A seven-year retrospective analysis Indian J Med Res; 2017, 146 (1): 111-120 **Address:** Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India. BACKGROUND & OBJECTIVES: Intestinal parasitic infections and their associated complications are a major cause of morbidity in the developing world. This retrospective study was done to assess the prevalence of intestinal parasitic infections among patients in a tertiary healthcare setting and to analyze age-, gender- and time-related trends in the prevalence of these intestinal parasites over a seven year period (2006-2012). METHODS: The presence of various intestinal parasites in a tertiary care setting over a seven year period in different age groups was determined by performing routine stool microscopy. Modified acid-fast staining was performed for stool samples collected from children less than five years of age for the detection of intestinal coccidian parasites. Statistical analysis was carried out to analyze age-related trends in relation to the prevalence of commonly detected intestinal parasites. Seasonal fluctuations in parasite prevalence were evaluated by performing harmonic regression analysis. RESULTS: A total of 257,588 stool samples were received over the seven year period for examination. The highest percentage of intestinal parasites was in the 6-10 yr age group. Among the intestinal parasites, Giardia intestinalis had the highest prevalence across most age groups, except in those above 60 yr of age where hookworm became more prevalent. A significant decreasing trend with age was observed for G. intestinalis, whereas for hookworm and Strongyloides stercoralis, an increasing trend with age was seen. Significant linear temporal trends were observed for parasites such as G. intestinalis, Entamoeba histolytica and Ascaris lumbricoides. INTERPRETATION & CONCLUSIONS: While G. intestinalis was more common in the younger age groups, certain soil-transmitted helminths such as hookworm and S. stercoralis showed a higher prevalence in the older populations. Significant	**NAT**	**JUL TO DEC**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**29168467 **PMCID:**5719595 **Impact Factor:** 2.061 **H-Index:** 68

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	temporal trends and seasonality were observed for some of the common intestinal parasites.				
504.	Prakash Parthiban, S., Rana, D., Jabbari, E., Benkirane-Jessel, N. and Ramalingam, M. Covalently immobilized VEGF-mimicking peptide with gelatin methacrylate enhances microvascularization of endothelial cells Acta Biomater; 2017, 51 330-340 **Address:** Institute of Tissue Regeneration Engineering, Dankook University, Cheonan 330-714, Republic of Korea. Centre for Stem Cell Research (CSCR), A Unit of Institute for Stem Cell Biology and Regenerative Medicine - Bengaluru, **Christian Medical College Campus,** Vellore 632002, India. Department of Chemical Engineering, University of South Carolina, SC 29208, USA. Universite de Strasbourg, ISERM, Osteoarticular and Dental Regenerative Nanomedicine Laboratory, UMR 1109, FMTS, Faculte de Medecine, Strasbourg 67085, France. Centre for Stem Cell Research (CSCR), A Unit of Institute for Stem Cell Biology and Regenerative Medicine - Bengaluru, **Christian Medical College Campus,** Vellore 632002, India; WPI-Advanced Institute for Materials Research, Tohoku University, Sendai 980-8577, Japan. Electronic **Address:** rmurug2000@gmail.com Clinically usable tissue-engineered constructs are currently limited due to their inability of forming microvascular networks necessary for adequate cellular oxygen and nutrient supply upon implantation. The aim of this study is to investigate the conditions necessary for microvascularization in a tissue-engineered construct using vascular endothelial growth factor (VEGF). The construct was made of gelatin methacrylate (GelMA) based cell-laden hydrogel system, which was then covalently linked with VEGF-mimicking peptide (AcQK), using human umbilical vein endothelial cells (HUVECs) as the model cell. The results of the mechanics and gene expression analysis indicated significant changes in mechanical properties and upregulation of vascular-specific genes. The major finding of this study is that the increased expression of vascular-specific genes could be achieved by employing AcQK in the GelMA based hydrogel system, leading to accelerated microvascularization. We conclude that GelMA with covalently-linked angiogenic peptide is a useful tissue engineered construct suitable for microvascularization.	**INT**	**JAN TO JUN**	**CENTRE FOR STEM CELL RESEARCH**	**PMID:**28110074 **Impact Factor:** 6.319 **H-Index:** 126

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	STATEMENT OF SIGNIFICANCE: (1) This study reports the conditions necessary for microvascularization in a tissue-engineered construct using vascular endothelial growth factor (VEGF). (2) The construct was made of gelatin methacrylate based cell-laden hydrogel system. (3) There is a significant change observed in mechanical properties and upregulation of vascular-specific genes, in particular CD34, when AcQK is used. (4) The major finding of this study is that the increased expression of vascular-specific genes, i.e., CD34 could be achieved by employing AcQK in the GelMA based hydrogel system, leading to accelerated microvascularization.				
505.	Prakash, J. A. J. Scrub typhus: risks, diagnostic issues, and management challenges Res Rep Trop Med; 2017, 8 73-83 Address: Department of Clinical Microbiology, **Christian Medical College, Vellore,** Tamil Nadu, India, prakjaj@cmcvellore.ac.in. Scrub typhus is an acute febrile illness in the "tsutsugamushi triangle", transmitted by chiggers that can be treated effectively if detected early. Laboratory testing, including molecular and serological assays, is needed for confirming the diagnosis, especially in the absence of the pathognomonic eschar. In this review, factors that play a role in disease occurrence and clinical clues for diagnosis, in addition to risk factors contributing to disease severity, including mortality, are discussed in detail. Moreover, issues related to diagnostic assays, treatment, and mixed infections are also enumerated and described.	**INT**	**JAN TO JUNE**	**CLINICAL MICROBIOLOGY**	**PMID:30050348** **PMC ID:6038894** **Impact Factor:** NA **H-Index:**NA
506.	Prakash, S. S. and Soundrarajan, J. Advising residents on how to present an article in a journal club Postgrad Med J; 2017, 93 (1100): 364-365 **Address:** Department of Biochemistry, **Christian Medical College, Vellore,** India. Department of Library Services, **Christian Medical College, Vellore,** India.	**INT**	**JAN TO JUN**	**BIOCHEMISTRY, LIBRARY SERVICES**	**PMID:**28270512 **Impact Factor:** 1.874 **H-Index:** 80
507.	Prakash, S. S., Muthuraman, N. and Anand, R. Short-duration podcasts as a supplementary learning tool: perceptions of medical students and impact on assessment performance BMC Med Educ; 2017, 17 (1): 167 **Address:** Department of Biochemistry, **Christian Medical College, Vellore,** Tamil Nadu, 632002, India. Department of Biochemistry, **Christian Medical College, Vellore,** Tamil Nadu, 632002, India. anandr@cmcvellore.ac.in.	**INT**	**JUL TO DEC**	**BIOCHEMISTRY**	**PMID:**28923046 **PMCID:**5604391 **Impact Factor:** 1.572 **H-Index:** 42

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	BACKGROUND: Use of podcasts has several advantages in medical education. Podcasts can be of different types based on their length: short (1-5 min), moderate (6-15 min) and long (>15 min) duration. Short-duration podcasts are unique since they can deliver high-yield information in a short time. The perceptions of medical students towards short-duration podcasts are not well understood and this study aimed to analyze the same. An exploratory analysis of students' podcast usage and performance in summative assessments was also undertaken. METHODS: First-year medical students (N = 94) participated in the study. Eight audiovisual podcasts, each </=3 min duration (3-MinuTe Lessons; 3MTLs) were developed for two topics in biochemistry. The podcasts were made available for students after didactic lectures on the topics. Feedback was collected from students about their perceptions to 3MTLs using a self-reported questionnaire. The scores of students in summative assessments were compared based on their usage of 3MTLs. RESULTS: Feedback revealed that 3MTLs were well received by students as a useful and convenient supplementary tool. Students used 3MTLs for topic review, to get an overview, as well as for quick revision and felt that 3MTLs were helpful in improving their understanding of the topic, clarify concepts and focus on important points and in turn, in preparation for assessments. A significant proportion (49%) felt that 3-min duration was optimal while, an equal proportion suggested an increase in the duration to 5 min with more information. The overall mean scores in assessments were not different between students based on 3MTLs usage. The pairwise comparisons revealed better scores amongst students who used 3MTLs for both topics. CONCLUSION: Overall, short-duration podcasts were perceived by students as useful supplementary learning tools that aided them for revision and in preparation for assessments.				
508.	Premkumar, R., Rajan, P., Rima, J. and Richard, J. Footwear in the causation and prevention of foot ulcers in diabetes mellitus Natl Med J India; 2017, 30 (5): 255-261 Address: Schieffelin Leprosy Research and Training Centre, Karigiri 632106, Tamil Nadu, India. Department of Distance Education, **Christian Medical College,** Vellore 632004, Tamil Nadu, India. Background.: Inappropriate footwear may be a major cause of foot ulceration among patients with diabetic neuropathy in India. No study has specifically examined the types of footwear or its components in patients with diabetes mellitus and their role in causing foot ulcers. We analysed the role of commonly used footwear in India in inducing first foot ulcers (FFU) in people with diabetes. Methods.: Of 4800 patients with diabetes attending our	**NAT**	**JUL TO DEC**	**DISTANCE EDUCATION**	**PMID:29916424** **Impact Factor:**1.412 **H-Index:**35

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	centre over 1 year, 301 had FFU from different causes. Sixty-six patients with diabetic neuro-/vasculopathy presenting with ulcers due to footwear were included as cases. An equal number of patients with diabetes but without foot ulcers were enrolled as controls. Cases and controls were matched demographically and clinically for type of diabetes, metabolic control, duration of diabetes, comorbid conditions and foot neurovascular status. We did a detailed foot examination for neurological, vascular and wound status. We also evaluated the footwear in both groups. Results.: In one-fifth of 335 limbs (301 patients), the primary cause for the FFU was use of inappropriate footwear. The patients used seven different models of footwear, six of which were found to be inappropriate. The straps of footwear caused over 50% of ulcers. Another one-third were due to penetration of sharp objects through the outer sole of footwear; among these cases, 1 3.6% of ulcers were caused by not using soft inner soles. Conclusions.: The use of softer insole is least effective in preventing foot ulcers. Similarly, straps contribute to a higher percentage of foot ulcers. Foot ulcers can be prevented by a combination of soft insole, with midsole and hard outsole with proper back counter and adjustable front and back straps.				
509.	Pricilla, R. A., David, K. V., Siva, R., Vimala, T. J., Rahman, S. P. and Angeline, N. Quality of Antenatal Care Provided by Nurse Midwives in an Urban Health Centre with Regard to Low-Risk Antenatal Mothers Indian J Community Med; 2017, 42 (1): 37-42 **Address:** Low Cost Effective Care Unit, Department of Community, College of Nursing, **Christian Medical College, Vellore,** Tamil Nadu, India. Family Medicine, College of Nursing, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Community Health Nursing, College of Nursing, **Christian Medical College, Vellore,** Tamil Nadu, India. **BACKGROUND:** India contributes to 19% of the global maternal deaths. Good quality antenatal care can prevent maternal deaths by early detection of complications and maintaining maternal health. There are few studies documenting quality of antenatal care in India. This study aimed to document the antenatal services provided by nurse midwives to low-risk pregnant mothers from an urban population. **AIMS:** The primary objective was to describe the quality of the antenatal care provided by nurse midwives of an urban health centre with regard to low-risk mothers. The secondary objective was to document the maternal and early neonatal outcomes of the enrolled mothers during the period of study. **METHODS:** This prospective cohort study was done on 200 pregnant women who	**NAT**	**JAN TO JUN**	**LOW COST EFFECTIVE CARE UNIT, COLLEGE OF NURSING**	**PMID:**28331252 **Impact Factor:**1.220 **H-Index:** 20

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	had antenatal care by nurse midwives between April 2014 and November 2014. The quality of care was assessed by a checklist adapted from World Health Organization (WHO). **RESULTS:** We report that the quality of antenatal care for all domains was above 90% except for the health education domain, which was poor with regard to breastfeeding and family planning in the enrolled 200 pregnant women. **CONCLUSION:** Our study concluded that trained nurse midwives when regularly monitored, audited and linked with reliable referral facilities can deliver good quality antenatal care.				
510.	***Pritish John Korula, Dr Rajasekar Arumugam*** Multidrug resistance, choice and utility of Antimicrobials in severe community acquired Intra-abdominal infections admitted to Intensive care Tropical Gastro-enterology. Vol 38, No 3 July-Sept 2017	**INT**	**JUL TO DEC**	**SICU**	**Impact Factor:**0.37 (2012)
511.	Priya, Mohana, Thomas, Anitha, Kumar, Ramani, Jeyaseelan, Visalakshi, Indrasingh, Inbam and Rabi, Suganthy The morphology and distribution of CD1a positive Langerhans cells in normal and squamous cell carcinoma of cervix Journal of the Anatomical Society of India; 2017, 66 (1): 15-19 https://doi.org/10.1016/j.jasi.2017.05.002 **AUTHOR INFORMATION:** a.Department of Anatomy, **Christian Medical College, Vellore,** India b.Department of Gynaecologic Oncology, **Christian Medical College, Vellore,** India c.Department of Pathology, **Christian Medical College, Vellore,** India d.Department of Biostatistics, **Christian Medical College, Vellore,** India e.Department of Anatomy, **Christian Medical College, Vellore** 632002, India Abstract: Introduction : Langerhans cells (LCs), a type of dendritic cells are the professional antigen presenting cells present in the mucosa surfaces. They play an important role in antitumor immune response. The present study aims to find out the morphology and distribution of CD1a positive LCs in normal and squamous cell carcinoma of cervix. Methods: Twenty two normal and eleven ectocervical specimens with squamous cell carcinoma were processed for immunohistochemistry and stained with monoclonal mouse anti-human CD1a (Dako, USA). The morphology of CD1a positive LCs was studied using Olympus BX43 microscope. Morphometric analysis was done using Cellsens imaging analysing software. Results: There was a statistically significant difference in the	**INT**	**JUL TO DEC**	**ANATOMY, GYNAECOLOGIC ONCOLOGY, PATHOLOGY, BIOSTATISTICS**	**NO PMID** **WOS:**000408049100003 **Impact Factor:**0.067 **H-Index:** 6

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	number of LCs between normal (8 ± 2.76) and squamous cell carcinoma of cervix (5.36 ± 2.88). In the region of lymphatic infiltration both in epithelium and lamina propria, there were more number of LCs and most of the cells lost their dendritic processes in squamous cell carcinoma. 31.77% of the cells had no dendritic processes. The difference in the mean diameters of LCs was statistically significant (p = 0.005) between normal and squamous cell carcinoma of cervix. Discussion: Fewer number of CD1a positive LCs and their loss of dendritic processes in the squamous cell carcinoma of cervix compared to normal cervix indicate that immune responses are suppressed in patients with cancer. Received 8 December 2016, Accepted 11 May 2017, Available online 26 May 2017.				
512.	Pugazhendhi, S., Baskaran, K., Santhanam, S. and Ramakrishna, B. S. Association of ATG16L1 gene haplotype with inflammatory bowel disease in Indians PLoS One; 2017, 12 (5): e0178291 **Address:** Wellcome Trust Research Laboratory, **Christian Medical College, Vellore,** India. Inflammatory bowel disease (IBD) is characterized by multigenic inheritance. Defects in autophagy related genes are considered to show genetic heterogeneity between populations. We evaluated the association of several single nucleotide polymorphisms (SNPs) in the autophagy related 16 like 1 (ATG16L1) gene with IBD in Indians. The ATG16L1 gene was genotyped for ten different SNPs using DNA extracted from peripheral blood of 234 patients with Crohn's disease (CD), 249 patients with ulcerative colitis (UC) and 393 healthy controls The SNPs rs2241880, rs4663396, rs3792106, rs10210302, rs3792109, rs2241877, rs6737398, rs11682898, rs4663402 and rs4663421 were genotyped using the Sequenom MassArray platform. PLINK was used for the association analysis and pairwise linkage disequilibrium (LD) values. Haplotype analysis was done using Haploview. All SNPs were in Hardy Weinberg equilibrium in cases and controls. The G allele at rs6737398 exhibited a protective association with both CD and UC. The T allele at rs4663402 and C allele at rs4663421 were positively associated with CD and UC. The T allele at rs2241877 exhibited protective association with UC only. The AA genotype at rs4663402 and the GG genotype at rs4663421 were protectively associated with both CD and UC. Haplotype analysis revealed that all the SNPs in	**INT**	**JAN TO JUN**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28542425 **Impact Factor:** 2.806 **H-Index:** 218

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	tight LD (D' = 0.76-1.0) and organized in a single haplotype block. Haplotype D was positively associated with IBD (P = 5.8 x 10-6 for CD and 0.002 for UC). SNPs in ATG16L1 were associated with IBD in Indian patients. The relevance to management of individual patients requires further study.				
513.	Purohit, N., Jain, A., Mathews, V. and Jayandharan, G. R. Genotyping and distribution of naturally occurring AAVs infecting human tissue Human Gene Therapy; 2017, 28 (12): A114-A114	**INT**	**JUL TO DEC**	**RADIOLOGY**	**NO PMID** **WOS:**000418410700362 **Impact Factor:** 4.187 **H-Index:** 137
514.	Putta, T., Chacko, B. R. and Joseph, E. Intracardiac fistula in a child: a rare complication of infective endocarditis Asian Cardiovasc Thorac Ann; 2017, 25 (5): 407-408 **Address:** Department of Radiology, **Christian Medical College, Vellore,** India.	**INT**	**JUL TO DEC**	**RADIOLOGY**	**PMID:**27002095 **Impact Factor:** 0.500 **H-Index:** 21
515.	Putta, T., Irodi, A., Thangakunam, B. and Oliver, A. Author's reply Indian J Radiol Imaging; 2017, 27 (1): 111 **Address:** Department of Radiology, **Christian Medical College, Vellore,** Tamil Nadu, India. E-mail: tharaniputta@gmail.com. Department of Pulmonary Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JAN TO JUN**	**RADIOLOGY**	**PMID:**28515599 **Impact Factor:** NA **H-Index:** 15
516.	Radhakrishna, V. N. and Madhuri, V. Management of pediatric open tibia fractures with supracutaneous locked plates J Pediatr Orthop B; 2017, **Address:** Department of Orthopaedics, Pediatric Orthopaedic Unit, **Christian Medical College, Vellore,** Tamil Nadu, India. We evaluated the novel application of supracutaneous locked plates in pediatric open tibia fractures. Pediatric open tibia fractures stabilized with a locked	**INT**	**JAN TO JUN**	**ORTHOPAEDICS, PAEDIATRIC ORTHOPAEDICS**	**PMID:**28079741 **Impact Factor:** 0.638 **H-Index:** 46

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	supracutaneous plate from January 2011 to December 2014 were reviewed. Twenty-eight children, mean age 8.9 years, with 29 open tibia fractures were included. Nine of these children who had metaphyseal or metadiaphyseal fractures did not require joint spanning. The mean follow-up duration was 13.5 months. The mean time to uneventful union was 11.46 weeks, with no unacceptable malunion. Supracutaneous locked plates showed early union and no refractures. They could favorably replace tubular external fixators in stabilizing pediatric open tibia fractures.				
517.	Radhakrishnan, R. C., Basu, G., George, R. E., Parmar, H. and Tamilarasi, V. Rituximab-induced urticarial dermatitis during the treatment of membranous nephropathy Saudi J Kidney Dis Transpl; 2017, 28 (3): 657-660 **Address:** Department of Nephrology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of General Pathology, **Christian Medical College, Vellore,** Tamil Nadu, India. Rituximab is a monoclonal antibody directed against B cells and is being increasingly used for various renal indications. Acute dermatologic manifestations such as urticaria are well known to occur during rituximab infusion. Here, we report the case of a 53- year-old female who was treated with rituximab for membranous nephropathy and developed an exanthematous rash, which progressed with a further dose of rituximab and was diagnosed as urticarial dermatitis. A review of literature showed that urticarial dermatitis following rituximab therapy has been seldom reported and identification of this complication is very important to avoid giving further doses and thus, increasing the severity of lesions.	**INT**	**JAN TO JUN**	**NEPHROLOGY, GENERAL PATHOLOGY**	**PMID:**28540910 **Impact Factor:** 0.740 **H-Index:** 20
518.	Rafees Hassan, Suma Susan Mathews, Rita Ruby Anbuselvi Albert Neurofibroma of larynx Med-ej, The Tamil Nadu Dr. MGR Medical University, Chennai. April 2017	**NAT**	**JAN-JUN**	**ENT UNIT 5, OTOLARYNGOLOGY V**	**Not Indexed in PubMed**
519.	Rafic, K. M., Peace, B. S. T., Babu, S. E. S. and Singh, I. R. R. A Hybrid Conformal Planning Technique with Solitary Dynamic Portal for Postmastectomy Radiotherapy with Regional Nodes J Med Phys; 2017, 42 (3): 116-122 **Address:** Department of Radiotherapy, **Christian Medical College, Vellore,** Tamil	**INT**	**JUL TO DEC**	**RADIOTHERAPY**	**PMID:**28974855 **PMCID:**5618456 **Impact Factor:** 0.980 **H-Index:** 16

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Nadu, India. PURPOSE: This study focuses on incorporation of a solitary dynamic portal (SDP) in conformal planning for postmastectomy radiotherapy (PMRT) with nodal regions with an intention to overcome the treatment planning limitations imposed by conventional techniques. MATERIALS AND METHODS: Twenty-four patients who underwent surgical mastectomy followed by PMRT were included in this study. Initially, a treatment plan comprising tangential beams fitted to beam's-eye-view (BEV) of chest wall (CW) and a direct anterior field fitted to BEV of nodal region, both sharing a single isocenter was generated using Eclipse treatment planning system. Multiple field-in-fields with optimum beam weights (5% per field) were added primarily from the medial tangent, fitted to BEV of entire target volume, and finally converted into a dynamic portal. Dosimetric analysis for the treatment plans and fluence verification for the dynamic portals were performed. RESULTS AND DISCUSSION: Conformal plans with SDP showed excellent dose coverage (V95%>95%), higher degree of tumor dose conformity (</=1.25) and homogeneity (</=0.12) without compromising the organ at risk sparing for PMRT with nodal region. Treatment plans with SDP considerably reduced the lower isodose spread to the ipsilateral lung, heart, and healthy tissue without affecting the dose homogeneity. Further, gamma evaluation showed more than 96% pixel pass rate for standard 3%/3 mm dose difference and distance-to-agreement criteria. Moreover, this plan offers less probability of "geometrical miss" at the highly irregular CW with regional nodal radiotherapy. CONCLUSION: Hybrid conformal plans with SDP would facilitate improved dose distribution and reduced uncertainty in delivery and promises to be a suitable treatment option for complex postmastectomy CW with regional nodal irradiation.				
520.	Raghavendran, A., Hernandez, A. L., Lensing, S., Gnanamony, M., Karthik, R., Sivasubramanian, M., Kannangai, R., Abraham, P., Mathai, D. and Palefsky, J. M. Genital Human Papillomavirus Infection in Indian HIV-Seropositive Men Who Have Sex With Men Sex Transm Dis; 2017, 44 (3): 173-180 **Address:** From the *Department of Clinical Virology, **Christian Medical College, Vellore,** India; daggerDepartment of Medicine, University of California, San	**INT**	**JAN TO JUN**	**CLINICAL VIROLOGY, MEDICINE**	**PMID:**28178116 **Impact Factor:** 2.358 **H-Index:** 92

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Francisco; double daggerDepartment of Biostatistics, University of Arkansas for Medical Sciences, Little Rock, AR; section signDepartment of Medicine, **Christian Medical College, Vellore,** India; and paragraph signThe Humsafar Trust, Mumbai, India. **BACKGROUND:** The incidence of penile cancer in Indian men is high. Little is known about genital human papillomavirus (HPV) infection in Indian HIV-seropositive men who have sex with men (MSM), a population that may be at particularly high risk for genital HPV infection and, potentially, penile cancer. In this study, we assessed the prevalence and risk factors for genital HPV infection in this population. DESIGN AND **METHODS:** Three hundred HIV-seropositive MSM were recruited from 2 clinical sites in India. They were tested for genital HPV infection using L1 HPV DNA polymerase chain reaction with probes specific for 29 types and a mixture of 10 additional types. Participants received an interviewer-administered questionnaire that included questions on demographics and behaviors. **RESULTS:** Human papillomavirus data were available from 299 participants. The prevalence of any HPV type in the penis and scrotum was 55% and 54%, respectively. Human papillomavirus type 35 was the most common oncogenic HPV type followed by HPV-16. In multivariate analysis, being the insertive partner with 100+ male partners increased the odds of any penile HPV infection compared with not being insertive with any partners (odds ratio, 2.5; 95% confidence interval, 1.3-5.1). Circumcision was protective against penile HPV infection (odds ratio, 0.39; 95% confidence interval, 0.19-0.76). **CONCLUSIONS:** The prevalence of penile and scrotal HPV infection was high among Indian HIV-seropositive MSM. The most common oncogenic HPV type in this population, HPV-35, is not included in any currently available HPV vaccines. Insertive anal sex with men and lack of circumcision were the primary risk factors for penile HPV infection in this population.				
521.	Raja, D. C., Subban, V., Victor, S. M., Joseph, G., Thomson, V. S., Kannan, K., Gnanaraj, J. P., Veerasekar, G., Thenpally, J. G., Livingston, N., Nallamothu, B. K., Alexander, T. and Mullasari, A. S. The impact of systems-of-care on pharmacoinvasive management with streptokinase: The subgroup analysis of the TN-STEMI programme Indian Heart J; 2017, 69 (5): 573-579 **Address:** Department of Cardiology, Madras Medical Mission, Chennai, Tamil Nadu, India.	**NAT**	**JUL TO DEC**	**CARDIOLOGY**	**PMID:**29054179 **PMCID:**5650587 **Impact Factor:** 0.610 **H-Index:** 32

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Cardiology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Cardiology, Stanley Medical College and Hospital, Chennai, Tamil Nadu, India. Department of Clinical Epidemiology, Kovai Medical Center and Hospital, Coimbatore, Tamil Nadu, India. Department of Internal Medicine and Michigan Center for Health Analytics and Medical Prediction, University of Michigan, Ann Arbor, United States. Department of Cardiology, Kovai Medical Center and Hospital, Coimbatore, Tamil Nadu, India. Department of Cardiology, Madras Medical Mission, Chennai, Tamil Nadu, India. Electronic address: sulu_ajit57@yahoo.co.in. OBJECTIVES: We evaluated the impact of implementation of the TN-STEMI programme on various characteristics of the pharmacoinvasive group by comparing clinical as well as angiographic outcomes between the pre- and post-implementation groups. METHODS: The TN-STEMI programme involved 2420 patients of which 423 patients had undergone a pharmacoinvasive strategy of reperfusion. Of these, 407 patients had a comprehensive blinded core-lab evaluation of their angiograms post-lysis and clinical evaluation of various parameters including time-delays and adverse cardio- and cerebro-vascular events at 1year. Streptokinase was used as the thrombolytic agent in 94.6% of the patients. RESULTS: In the post-implementation phase, there was a significant improvement in 'First medical contact (FMC)-to-ECG' (11 vs. 5min, p<0.001) and 'Lysis-to-angiogram' (98.3 vs. 18.2h, p<0.001) times. There was also a significant improvement in the number of coronary angiograms performed within 24h (20.7% vs. 69.3%, p<0.001). The 'Time-to-FMC' (160 vs. 135min, p=0.07) and 'Total ischemic time' (210 vs. 176min, p=0.22) also showed a decreasing trend. IRA patency rate (70.2% vs. 86%, p<0.001) and thrombus burden (TIMI grade 0: 49.1% vs. 73.4%, p<0.001) were superior in this group. The MACCE rates were similar except for fewer readmissions (29.8% vs. 12.6%, p=0.0002) and target revascularizations at 1year (4.8% vs. none, p=0.002) in the post-implementation group. CONCLUSION: The implementation of a system-of-care (hub-and-spoke model) in the pharmacoinvasive group of the TN-STEMI programme demonstrated shorter lysis-to-angiogram times, better TIMI flow patterns and lower thrombus burden in the post-implementation phase.				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
522.	Rajagopal, R. and Gupta, A. Transcranial Doppler flow patterns in brain death: "Storm before the calm" Neurol India; 2017, 65 (3): 671-672 **Address:** Department of Neurological Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JAN TO JUN**	**NEUROLOGICAL SCIENCES**	**PMID:**28488654 **Impact Factor:** 1.758 **H-Index:** 39
523.	Rajagopal, R. and Nair, S. Importance of evaluating posterior circulation flow to confirm brain death Neurol India; 2017, 65 (4): 912 **Address:** Neuro Intensive Care Unit, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JUL TO DEC**	**NEURO INTENSIVE CARE UNIT**	**PMID:**28681786 **Impact Factor:** 1.758 **H-Index:** 39
524.	Rajagopal, R., Ganesh, S. and Vetrivel, M. Neurogenic Pulmonary Edema in Traumatic Brain Injury Indian J Crit Care Med; 2017, 21 (5): 329-331 **Address:** Department of Neurological Sciences, **CMC, Vellore,** Tamil Nadu, India. A 29-year-old male admitted with severe traumatic brain injury following a road traffic accident was sedated and ventilated uneventfully for 72 h. On the fourth posttrauma day, after stopping sedation to assess readiness for extubation, he developed sudden onset desaturation; arterial blood gas showed severe diffusion defect with very low PaO2/FiO2 ratio following an episode of generalized tonic-clonic seizure. The differential diagnoses and further management are discussed.	**NAT**	**JAN TO JUN**	**NEUROLOGICAL SCIENCES**	**PMID:**28584438 **Impact Factor:** 0.760 **H-Index:** 19
525.	Rajagopal, R., Swaminathan, G., Nair, S. and Joseph, M. Hyponatremia in Traumatic Brain Injury: A Practical Management Protocol World Neurosurg; 2017, 108 529-533 **Address:** Department of Neurological Sciences, **Christian Medical College, Vellore,** India. Electronic address: ramanashiva@gmail.com. Department of Neurological Sciences, **Christian Medical College, Vellore,** India.	**INT**	**JUL TO DEC**	**NEUROLOGICAL SCIENCES**	**PMID:**28899834 **Impact Factor:** 2.592 **H-Index:** 78

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	BACKGROUND: Hyponatremia (defined as serum sodium <135 mEq/L) is the most common electrolyte abnormality in traumatic brain injury (TBI) and is also an independent predictor of poor neurologic outcome. The reported incidence of hyponatremia varies widely in literature reports, and there is continuing difficulty in clearly differentiating between the 2 common causes of hyponatremia with natriuresis: the syndrome of inappropriate antidiuretic hormone secretion (SIADH) and cerebral salt wasting (CSW). We encounter hyponatremia frequently in our practice, and we therefore decided to review data from our center to estimate the incidence of hyponatremia and the results of our management strategies, and attempt to formulate simple guidelines for the correction of hyponatremia in TBI. METHODS: A retrospective analysis of 1500 consecutively admitted patients with TBI was performed by the use of electronic records and radiographic review. Hyponatremia was defined as serum sodium <135 mEq/L, and natriuresis as a urine spot sodium of more than >40 mEq/L. The incidence of TBI, its management, and the effect of fludrocortisone were evaluated. RESULTS: The incidence of hyponatremia was 13.2%. Early therapy with fludrocortisone significantly reduced the duration of hospital stay ($P < 0.05$). Traumatic subarachnoid hemorrhage was the most common abnormality on the admission computed tomographic scan in patients who experienced hyponatremia. CONCLUSION: Early initiation of fludrocortisone in the setting of hyponatremia with natriuresis decreases the hospital stay. This protocol is probably safer in a tropical country where fluid restriction might be harmful. It also eliminates the need to differentiate between SIADH and CSW.				
526.	Rajamani Sekar, S. K., Veeraraghavan, B., Anandan, S., Devanga Ragupathi, N. K., Sangal, L. and Joshi, S. Strengthening the laboratory diagnosis of pathogenic Corynebacterium species in the Vaccine era Lett Appl Microbiol; 2017, 65 (5): 354-365 **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore,** India. World Health Organization (WHO) Country Office, New Delhi, India. Over the last three decades, successful implementation of the diphtheria vaccination in the developed and developing countries has reduced the infections	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY**	**PMID:**28741682 **Impact Factor:** 1.575 **H-Index:** 87

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	caused by the toxigenic strains of Corynebacterium diphtheriae, but a concomitant increase in the invasive infections due to the nontoxigenic strains was seen. In addition, the recent reports on the emergence of nontoxigenic toxin gene-bearing strains, having the potential to revert back to toxigenic form poses a significant threat to human beings. Besides infections caused by C. diphtheriae, the emergence of the respiratory, cutaneous and invasive infections by related pathogenic Corynebacterium species like C. ulcerans and C. pseudotuberculosis, complicate the diagnosis and management of infection. These observations together with the widespread prevalence of diphtheria in the vaccine era, necessitates the strengthening of the epidemiological surveillance and laboratory diagnosis of the pathogen. This review provides the overview of the advantages and limitations of different molecular methods and the role of MALDI-TOF in the laboratory diagnosis of Diphtheria. The contribution of next generation sequencing technology and different genotyping techniques in understanding the pathogenicity, transmission dynamics and epidemiology of the C. diphtheriae is discussed.				
527.	Rajan, R. J., Mohanraj, P. and Rose, W. Subcutaneous Basidiobolomycosis Resembling Fournier's Gangrene J Trop Pediatr; 2017, 63 (3): 217-220 **Address:** Department of Pediatrics, **Christian Medical College, Vellore** 632004, India. Department of Microbiology, **Christian Medical College, Vellore** 632004, India. Basidiobolomycosis is an uncommon cutaneous zygomycete infection typically seen in immunocompetent individuals. Diagnosis can be made by biopsy and fungal culture of the lesion. Treatment with Potassium iodide and co-trimoxazole is simple and effective. Early and accurate diagnosis of basidiobolomycosis is essential to avoid dissemination and mortality. We present a case with basidiobolomycosis resembling Fournier's gangrene.	**INT**	**JAN TO JUN**	**PEDIATRICS, CLINICAL MICROBIOLOGY**	**PMID:**27794531 **Impact Factor:** 1.093 **H-Index:** 44
528.	Rajaratnam, Simon, Bhatt, Anjali, Chase, Suchita and George, Oommen An unusual cause of acquired cardiac dextroposition Current Medical Issues; 2017, 15 (3): 237-239	**NAT**	**JUL TO DEC**	**ENDOCRINOLOGY, GENERAL SURGERY,**	**Not Indexed in PubMed**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Author Address: 1.Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College, Vellore,** India 2.Department of General Surgery, Diabetes and Metabolism, **Christian Medical College, Vellore,** India 3.Department of Cardiology, Diabetes and Metabolism, **Christian Medical College, Vellore,** India Cardiac dextroposition is the horizontal displacement of the heart into the right hemithorax. We present a case with an unusual cause of cardiac dextroposition. A 75-year-old, morbidly obese woman on regular follow-up for diabetes, hypertension, and ischemic heart disease presented with complaints of a persistent cough. Her chest X-ray showed elevation of the left dome of the diaphragm and shift of the mediastinum to the right which was a new finding as compared to her previous chest X-ray taken in April 2012. Subsequent radiological examination revealed the presence of a well-defined, fat-containing mass in the left hypochondrium displacing the stomach, spleen, and transverse colon downward. She was taken up for laparotomy, and a 2 kg well-circumscribed intraperitoneal tumor was excised from the left hypochondrium. The biopsy showed a well-differentiated liposarcoma. New-onset cardiac dextroposition is usually secondary to pathology in the lungs or the pleura or the diaphragm. An intra-abdominal tumor causing cardiac dextroposition has not been reported so far. DOI: 10.4103/cmi.cmi_49_17			**CARDIOLOGY**	
529.	Rajkumar, S., Sistla, S., Manoharan, M., Sugumar, M., Nagasundaram, N., Parija, S. C., Ray, P., Bakthavatchalam, Y. D., Veeraraghavan, B., Kapil, A., Walia, K. and Ohri, V. C. Prevalence and genetic mechanisms of antimicrobial resistance in Staphylococcus species: A multicentre report of the indian council of medical research antimicrobial resistance surveillance network Indian J Med Microbiol; 2017, 35 (1): 53-60 **Address:** Department of Microbiology, Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry, India. Department of Microbiology, Postgraduate Institute of Medical Education and Research, Chandigarh, India. Department of Microbiology, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY**	**PMID:**28303819 **Impact Factor:** 1.149 **H-Index:** 38

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Microbiology, All India Institute of Medical Sciences, New Delhi, India. Division of Epidemiology and Communicable Diseases, Indian Council of Medical Research, New Delhi, India. **PURPOSE:** Routine surveillance of antimicrobial resistance (AMR) is an essential component of measures aimed to tackle the growing threat of resistant microbes in public health. This study presents a 1-year multicentre report on AMR in Staphylococcus species as part of Indian Council of Medical Research-AMR surveillance network. **MATERIALS AND METHODS:** Staphylococcus species was routinely collected in the nodal and regional centres of the network and antimicrobial susceptibility testing was performed against a panel of antimicrobials. Minimum inhibitory concentration (MIC) values of vancomycin (VAN), daptomycin, tigecycline and linezolid (LNZ) against selected methicillin-resistant Staphylococcus aureus(MRSA) isolates were determined by E-test and MIC creep, if any, was determined. Resistant genotypes were determined by polymerase chain reaction for those isolates showing phenotypic resistance. **RESULTS:** The prevalence of MRSA was found to be range from moderate (21%) to high (45%) among the centres with an overall prevalence of 37.3%. High prevalence of resistance was observed with commonly used antimicrobials such as ciprofloxacin and erythromycin in all the centres. Resistance to LNZ was not encountered except for a single case. Full-blown resistance to VAN in S. aureus was not observed; however, a few VAN-intermediate S. aureus isolates were documented. The most common species of coagulase negative staphylococci (CoNS) identified was Staphylococcus haemolyticus and Staphylococcus epidermidis. Resistance among CoNS was relatively higher than S. aureus. Most phenotypically resistant organisms possessed the corresponding resistance genes. **CONCLUSION:** There were localised differences in the prevalence of resistance between the centres. The efficacy of the anti-MRSA antimicrobials was very high; however, almost all these antimicrobials showed evidence of creeping MIC.				
530.	Rajkumari, R., Jose, J. M. and Brahmadathan, K. N. Genetic diversity and allelic variation in south Indian isolates of Group A streptococci causing invasive disease Indian J Med Microbiol; 2017, 35 (4): 575-579 Address: Division of Integrative Biology, School of Bio-Sciences and Technology, VIT University, Vellore, India. Department of Microbiology, **Christian Medical College, Vellore,** India. Microbiological Laboratory, Coimbatore, Tamil Nadu, India. BACKGROUND: Reported literature on invasive group A streptococcal isolates in India is very	**NAT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY**	**PMID:29405152** **Impact Factor:** 1.149 **H-Index:**38

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	scanty. This study was undertaken to determine the molecular heterogeneity of such isolates as seen in a tertiary care center. MATERIALS AND METHODS: Thirty two blood culture isolates and 18 from other sterile body fluids were characterized by emm gene sequencing and multilocus sequence typing. RESULTS: Forty two emm types were identified including 25 from 32 blood isolates and 17 from 18 other body fluid isolates. Types 110, 74, 63, 85, 102, 105, 124 and st854.1 were common to both groups and accounted for 40% of the isolates. Two types namely, stKNB6 and stKNB9 were newly identified types. MLST identified forty eight sequence types (MLST - ST) of which 31 were from 32 blood isolates and 17 from 18 body fluid isolates; thirty three of them were hitherto unrecognized at the time of identification. Two blood isolates of emm 85 had the same MLST - ST 484 while three blood isolates of emm 110 had three different STs namely, ST 493, 494 and 497. Two types, ST 493 and ST497 had single locus variation while ST 497 had a double locus variation. CONCLUSIONS: Our study shows that subtle allelic variations in the house keeping genes results in the development of new strains in a given emm type and contribute significantly to the existing high diversity of strains circulating in the community.				
531.	Rajshekhar, V. and Alexander, M. Prof. K V Mathai (1926 - 2017) Obituary Neurol India; 2017, 65 (6): 1456-1458 **Address:** Department of Neurological Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JUL TO DEC**	**NEUROLOGICAL SCIENCES**	**PMID:**29133749 **WOS:**000415249200070 **Impact Factor:**1.758 **H-Index:** 39
532.	Rajshekhar, V. and Babu, S. Motor evoked potential alarm criteria: Not yet at the finish line Neurol India; 2017, 65 (4): 716-717 **Address:** Department of Neurological Sciences, **Christian Medical College Hospital, Vellore,** Tamil Nadu, India.	**NAT**	**JUL TO DEC**	**NEUROLOGICAL SCIENCES**	**PMID:**28681738 **Impact Factor:** 1.758 **H-Index:** 39
533.	Raju NA, Rao SV, Joel JC, Jacob GG, Anil AK, Gowri SM, Kandasamy S. Predictive Value of Serum Myoglobin and Creatine Phosphokinase for Development of Acute Kidney Injury in Traumatic Rhabdomyolysis Indian J Crit Care Med. 2017 Dec;21(12):852-856. doi: 10.4103/ijccm.IJCCM_186_17.	**NAT**	**JUL-DEC**	**SICU, BIOSTATISTICS**	**PMID:**29307967 **PMCID:**PMC5752795 **Impact Factor:** 0.76 H Index: 19 Indexed in: Scopus, Embase,

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
					Pubmed, ICI
534.	Ralser, Damian J., Basmanav, F. Buket Ue, Tafazzoli, Aylar, Wititsuwannakul, Jade, Delker, Sarah, Danda, Sumita, Thiele, Holger, Wolf, Sabrina, Busch, Michelle, Pulimood, Susanne A., Altmueller, Janine, Nuernberg, Peter, Lacombe, Didier, Hillen, Uwe, Wenzel, Joerg, Frank, Jorge, Odermatt, Benjamin and Betz, Regina C. Mutations in gamma-secretase subunit-encoding PSENEN underlie Dowling-Degos disease associated with acne inversa J Clin Invest. 2017 Apr 3;127(4):1485-1490. doi: 10.1172/JCI90667. Epub 2017 Mar 13. Dowling-Degos disease (DDD) is an autosomal-dominant disorder of skin pigmentation associated with mutations in keratin 5 (KRT5), protein O-fucosyltransferase 1 (POFUT1), or protein O-glucosyltransferase 1 (POGLUT1). Here, we have identified 6 heterozygous truncating mutations in PSENEN, encoding presenilin enhancer protein 2, in 6 unrelated patients and families with DDD in whom mutations in KRT5, POFUT1, and POGLUT1 have been excluded. Further examination revealed that the histopathologic feature of follicular hyperkeratosis distinguished these 6 patients from previously studied individuals with DDD. Knockdown of psenen in zebrafish larvae resulted in a phenotype with scattered pigmentation that mimicked human DDD. In the developing zebrafish larvae, in vivo monitoring of pigment cells suggested that disturbances in melanocyte migration and differentiation underlie the DDD pathogenesis associated with PSENEN. Six of the PSENEN mutation carriers presented with comorbid acne inversa (AI), an inflammatory hair follicle disorder, and had a history of nicotine abuse and/or obesity, which are known trigger factors for AI. Previously, PSENEN mutations were identified in familial AI, and comanifestation of DDD and AI has been reported for decades. The present work suggests that PSENEN mutations can indeed cause a comanifestation of DDD and AI that is likely triggered by predisposing factors for AI. Thus, the present report describes a DDD subphenotype in PSENEN mutation carriers that is associated with increased susceptibility to AI. DOI: 10.1172/JCI90667	**INT**	**JAN TO JUN**	**CLINICAL GENETICS**	**PMID:**28287404 **PMCID:PMC**5373890 **WOS:**000398183300036 **Impact Factor:** 12.784 **H-Index:** 426
535.	Ramadass, B., Rani, B. S., Pugazhendhi, S., John, K. R. and Ramakrishna, B. S. Faecal microbiota of healthy adults in south India: Comparison of a tribal & a rural population Indian J Med Res; 2017, 145 (2): 237-246	**NAT**	**JAN TO JUN**	**GASTROINTESTINAL SCIENCES, COMMUNITY HEALTH**	**PMID:**28639601 **Impact Factor:** 1.532 **H-Index:** 68

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Department of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India. Department of Community Health, **Christian Medical College, Vellore**; Institute of Gastroenterology, SRM Institutes for Medical Science, Chennai, India. Department of Gastrointestinal Sciences, **Christian Medical College, Vellore**; Institute of Gastroenterology, SRM Institutes for Medical Science, Chennai, India. **BACKGROUND &OBJECTIVES:** The relevance of the gut microbiota to human health is increasingly appreciated. The objective of this study was to compare the gut microbiota of a group of adult tribals with that of healthy adult villagers in Tamil Nadu, India. **METHODS:** Faeces were collected from 10 healthy tribal adults (TAs) in the Jawadhi hills and from 10 healthy villagers [rural adults (RAs)] in Vellore district, Tamil Nadu. DNA was extracted, and 456 bp segments comprising hypervariable regions 3 and 4 of the 16S rRNA gene were amplified, barcoded and 454 sequenced. **RESULTS:** Totally 227,710 good-quality reads were analyzed. TAs consumed a millets-based diet, ate pork every day, and did not consume milk or milk products. RAs consumed a rice-based diet with meat intake once a week. In both groups, Firmicutes was the most abundant phylum, followed by Proteobacteria, Bacteroidetes and Actinobacteria. The median Firmicutes-to-Bacteroidetes ratio was 34.0 in TA and 92.9 in RA groups. Actinobacteria were significantly low in TA, possibly due to non-consumption of milk. Clostridium constituted the most abundant genus in both groups, but was significantly more abundant in TAs than RAs, while Streptococcus was significantly more abundant in RA ($P<0.05$). Analyses of genetic distance revealed that the microbiota were distinctly different between TA and RA, and principal component analysis using 550 distinct taxonomically identifiable sequences revealed a clear separation of microbiota composition in the two groups. Phylogenetic analysis of major microbiota indicated clustering of microbial groups at different major branch points for TAs and RAs. INTERPRETATION &**CONCLUSIONS:** Phylum Firmicutes and genus Clostridium constituted the bulk of the faecal microbiota, while significant differences in composition between the groups were probably due to differences in diet and lifestyle.				
536.	Ramakant, P., Paul, M. J., Paul, T. V., Rao, S. D., Abraham, D. T., Uttley, L., Balasubramanian, S. P. and Tharyan, P. Surgery versus surveillance for asymptomatic (mild) primary hyperparathyroidism in adults 50 years or older	**INT**	**JUL TO DEC**	**ENDOCRINE SURGERY, ENDOCRINOLOGY**	**PMID:**CD010093 **SCOPUS Impact Factor:** 6.124

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Cochrane Database of Systematic Reviews; 2017, 2017 (7): **Address:CMC Vellore,** Endocrine Surgery, Ida Scudder Road, Vellore, Tamil Nadu, India **CMC Vellore,** Department of Endocrinology, Ida Scudder Road, Vellore, Tamil Nadu, India Henry Ford Hospital, Division of Endocrinology and Bone and Mineral Metabolism, 3031 W. Grand Blvd, Suite 800, Detroit, MI, United States University of Sheffield, School of Health and Related Research, Sheffield, United Kingdom Sheffield Teaching Hospitals, Endocrine Surgery, Department of General Surgery, Glossop Road, Sheffield, South Yorkshire, United Kingdom **Christian Medical College,** Cochrane South Asia, Prof. BV Moses Center for Evidence-Informed Health Care and Health Policy, Carman Block II Floor, CMC Campus, Bagayam, Vellore, Tamil Nadu, India This is a protocol for a Cochrane Review (Intervention). The objectives are as follows: To assess the outcomes of surgery versus surveillance in patients with mild asymptomatic primary hyperparathyroidism. © 2017 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd.				**H-Index:** 189
537.	Ramakrishna, K., Premkumar, K., Kabeerdoss, J. and John, K. R. Impaired toll like receptor 9 response in pulmonary tuberculosis Cytokine; 2017, 90 38-43 **Address:** Wellcome Trust Research Laboratory, **Christian Medical College, Vellore** 632004, India. Electronic **Address:** kartik_ramakrishna@hotmail.com. Wellcome Trust Research Laboratory, **Christian Medical College, Vellore** 632004, India. Department of Community Health, **Christian Medical College, Vellore** 632004, India. BACKGROUND &**AIM:** Innate immune responses are important in susceptibility to pulmonary tuberculosis (TB). In order to test the hypothesis that Toll-like receptor (TLR) 2 function would be abnormal in patients with active pulmonary TB we compared the cytokine responses of peripheral blood mononuclear cells (PBMC) to	**INT**	**JAN TO JUN**	**WELLCOME TRUST RESEARCH LABORATORY, COMMUNITY HEALTH**	**PMID:**27768958 **Impact Factor:** 3.488 **H-Index:** 96

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	innate immune ligands in a case-control study. **METHODS:** PBMC from 19 untreated pulmonary TB patients, 17 healthy controls, and 11 treated pulmonary TB patients, were cultured for 24h with TLR 2 ligand (PAM-CSK) and other TLR ligands (muramyl dipeptide, flagellin, lipopolysaccharide (LPS), CpG oligodeoxynucleotide (CpG-ODN)). Interleukin-8 (IL-8) was estimated in the supernatant by ELISA. Messenger RNA expression for inflammatory cytokines was quantitated using real time PCR. **RESULTS:** The important findings were (1) reduced PBMC secretion of IL-8 in response to all ligands in active TB; (2) normal to increased PBMC secretion of IL-8 in response to all ligands except CpG ODN (TLR 9 ligand) in TB patients who had recovered; (3) absence of difference in mRNA expression for a consortium of inflammatory pathway genes between healthy controls, active pulmonary tuberculosis and treated pulmonary tuberculosis patients. **CONCLUSION:** There was a generalized post-translational suppression of the IL-8 response to innate immune ligands in active TB. There appears to be a defect of TLR 9 signaling in patients with tuberculosis, the nature of which needs to be further explored.				
538.	Ramamoorthy, H., Abraham, P., Isaac, B. and Selvakumar, D. Role for NF-kappaB inflammatory signalling pathway in tenofovir disoproxil fumarate (TDF) induced renal damage in rats Food Chem Toxicol; 2017, 99 103-118 **Address:** Department of Biochemistry, **Christian Medical College,** Bagayam, Vellore 632002, Tamil Nadu, India. Department of Biochemistry, **Christian Medical College,** Bagayam, Vellore 632002, Tamil Nadu, India. Electronic **Address:** premilaabraham@cmcvellore.ac.in Department of Anatomy, **Christian Medical College,** Bagayam, Vellore 632002, Tamil Nadu, India. Nephrotoxicity due to tenofovir treatment of HIV patients has been reported. However, the mechanism of tenofovir nephrotoxicity is not clear. NFkappaB is an important proinflammatory transcription factor that plays a pivotal role in oxidative stress-induced inflammation. We hypothesized that NFkappaB proinflammatory signalling pathway may play a role in tenofovir induced renal damage. Renal damage was induced in adult male Wistar rats by the oral administration of 600 mg/kg body wt. daily for 5 consecutive weeks. Kidneys were removed and used for histological and biochemical analysis. The protein and mRNA expressions of	**INT**	**JAN TO JUN**	**BIOCHEMISTRY**	**PMID:**27899301 **Impact Factor:** 3.778 **H-Index:** 131

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	NFkappaB and its target genes namely iNOS, COX-2 and TNFalpha, and its inhibitor IkappaB-alpha were analysed by immunohistochemical methods, western blot and quantitative RT PCR. NFkappaBp65 activity was determined by ELISA. The protein and mRNA expressions of NFkappaB p65, iNOS, COX-2 and TNFalpha were increased in the kidneys of TDF treated rats. The activity of NFkappaBp65 was increased by 28 fold in the nuclear fractions of the TDF treated rat kidneys. Pretreatment with melatonin, a NFkappaB inhibitor attenuated TDF induced renal damage. It is concluded that the activation of NFkappaB and its downstream proinflammatory target genes iNOS, COX-2, and TNF-alpha may contribute to the pathophysiology of TDF induced renal damage.				
539.	Ramamurthy, M., Sankar, S., Kannangai, R., Nandagopal, B. and Sridharan, G. Application of viromics: a new approach to the understanding of viral infections in humans Virusdisease; 2017, 28 (4): 349-359 **Address:** Sri Sakthi Amma Institute of Biomedical Research, Sri Narayani Hospital and Research Centre, Sripuram, Vellore, Tamil Nadu 632 055 India.grid.460832.b Department of Clinical Virology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu 632 004 India.0000 0004 1767 8969grid.11586.3b This review is focused at exploring the strengths of modern technology driven data compiled in the areas of virus gene sequencing, virus protein structures and their implication to viral diagnosis and therapy. The information for virome analysis (viromics) is generated by the study of viral genomes (entire nucleotide sequence) and viral genes (coding for protein). Presently, the study of viral infectious diseases in terms of etiopathogenesis and development of newer therapeutics is undergoing rapid changes. Currently, viromics relies on deep sequencing, next generation sequencing (NGS) data and public domain databases like GenBank and unique virus specific databases. Two commonly used NGS platforms: Illumina and Ion Torrent, recommend maximum fragment lengths of about 300 and 400 nucleotides for analysis respectively. Direct detection of viruses in clinical samples is now evolving using these methods. Presently, there are a considerable number of good treatment options for HBV/HIV/HCV. These viruses however show development of drug resistance. The drug susceptibility regions of the genomes are sequenced and the prediction of drug resistance is now possible from 3 public domains available on the web. This has been made possible through advances in the technology with the advent of high throughput sequencing and meta-analysis	**INT**	**JUL TO DEC**	**CLINICAL VIROLOGY**	**PMID:**29291225 **PMCID:**5747850 **Impact Factor:** 0.780 **H-Index:** 10

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	through sophisticated and easy to use software and the use of high speed computers for bioinformatics. More recently NGS technology has been improved with single-molecule real-time sequencing. Here complete long reads can be obtained with less error overcoming a limitation of the NGS which is inherently prone to software anomalies that arise in the hands of personnel without adequate training. The development in understanding the viruses in terms of their genome, pathobiology, transcriptomics and molecular epidemiology constitutes viromics. It could be stated that these developments will bring about radical changes and advancement especially in the field of antiviral therapy and diagnostic virology.				
540.	Ramasamy, A., Jothivel, N., Das, S., Swapna, A., Albert, A. P., Barnwal, P. and Babu, D. Evaluation of the Protective Role of Glycine max Seed Extract (Soybean Oil) in Drug-Induced Nephrotoxicity in Experimental Rats J Diet Suppl; 2017, 1-13 **Address:** a Department of Pharmacology , GIET School of Pharmacy , Rajahmundry , India. b Department of Pharmacy Practice , The Erode College of Pharmacy and Research Institute , Erode , India. c Department of Pharmacology and Clinical Pharmacology , **Christian Medical College** , Vellore , India. d Department of Pharmacology , MNR College of Pharmacy , Hyderabad , India. e Department of Biotechnology , Faculty of Technology, Mahasarakham University , Maha Sarakham , Thailand. f Department of Medical Elementology and Toxicology , School of Chemical and Life Sciences, Jamia Hamdard (Hamdard University) , New Delhi , India. g Faculty of Pharmacy and Pharmaceutical Sciences , University of Alberta , Edmonton , Canada. This study was conducted to evaluate the nephroprotective effect of Glycine max seed extract (soybean oil) against gentamicin- and rifampicin-induced nephrotoxicity in Sprague-Dawley rats and to compare its effects with those of vitamin E, which has well-established antioxidant and nephroprotective effects. Sixty male Sprague-Dawley rats (body weight 150-210 g) were divided into 10 groups. The first five groups were treated for 14 consecutive days with normal saline (5 ml/kg, by mouth [p.o.]); gentamicin (80 mg/kg intraperitoneally [i.p.]);	**INT**	**JUL TO DEC**	**PHARMACOLOGY AND CLINICAL PHARMACOLOGY**	**PMID:**28956655 **Impact Factor:** 1.050 **H-Index:** 15

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	gentamicin (80 mg/kg, i.p.) + vitamin E (250 mg/kg p.o.); gentamicin (80 mg/kg i.p.) + soybean oil (2.5 ml/kg p.o.); and gentamicin (80 mg/kg, i.p.) + soybean oil (5 ml/kg p.o.), respectively. For the next five groups, the same group allocation was done, but gentamicin was replaced with rifampicin (1 g/kg i.p.). Various biomarkers for nephrotoxicity in serum and urine were evaluated along with histopathological examination of kidneys. Analysis of variance (ANOVA) was done following Tukey's multiple comparison test; $p < .05$ was considered significant. Soybean oil in both doses significantly ($p < .005$) decreased serum blood urea nitrogen, creatinine, urea, uric acid and urine volume, kidney weight, urinary sodium, urinary potassium, and total protein and significantly ($p < .005$) increased serum total protein and urine creatinine in gentamicin- and rifampicin-treated animals, exhibiting nephroprotective effects. Soybean oil also showed strong antioxidant effects, causing significant ($p < .005$) increase in kidney homogenate catalases, glutathione peroxidase, and superoxide dismutase and significant ($p < .005$) decrease in lipid peroxidase in gentamicin- and rifampicin-treated animals. Soybean oil demonstrated good nephroprotective activity due to antioxidant effects				
541.	Ramasamy, B., Thewlis, D., Moss, M. J., Fraysse, F., Rickman, M. and Solomon, L. B. Complications of trans arterial embolization during the resuscitation of pelvic fractures Injury; 2017, 48 (12): 2724-2729 **Address:** Department of Orthopaedics 3, Paul Brand Building, **Christian Medical College, Vellore,** 632004, Tamil Nadu, India; Centre for Stem Cell Research (A unit of inStem), **Christian Medical College, Vellore** 632002, Tamil Nadu, India. Electronic address: jpboopy@gmail.com. Centre for Orthopaedic & Trauma Research and Discipline of Orthopaedics and Trauma, The University of Adelaide, Adelaide, SA 5000, Australia. Electronic address: dominic.thewlis@adelaide.edu.au. Department of Radiology, Royal Adelaide Hospital, Adelaide, SA 5000, Australia. Electronic address: mary.moss@sa.gov.au. School of Health Sciences, University of South Australia, Adelaide, SA 5000, Australia. Electronic address: francoise.fraysse@unisa.edu.au. Centre for Orthopaedic & Trauma Research and Discipline of Orthopaedics and Trauma, The University of Adelaide, Adelaide, SA 5000, Australia; Department of Orthopaedics and Trauma, Royal Adelaide Hospital, Adelaide, SA 5000, Australia. Electronic address: mark.rickman@sa.gov.au.	**INT**	**JUL TO DEC**	**ORTHOPAEDICS 3, CENTRE FOR STEM CELL RESEARCH**	**PMID:**29096928 **Impact Factor:** 1.894 **H-Index:** 96

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Centre for Orthopaedic & Trauma Research and Discipline of Orthopaedics and Trauma, The University of Adelaide, Adelaide, SA 5000, Australia; Department of Orthopaedics and Trauma, Royal Adelaide Hospital, Adelaide, SA 5000, Australia. Electronic address: bogdan.solomon@sa.gov.au. INTRODUCTION: Trans arterial embolization (TAE) can stem uncontrolled bleeding associated with pelvic fractures, but is associated with potential complications. This study investigated and compared the early to midterm complications in two patient cohorts: one who did and one who did not undergo TAE. METHODOLOGY: The results of 14 patients who underwent TAE in the resuscitation phase, and then had their pelvic fractures managed non-operatively, the study group (Group 1), were compared with those of a control group (Group 2) of 14 patients matched for age, sex, injury and management, that did not undergo TAE. All patients were examined clinically and answered a questionnaire on bowel and urinary function, pain and limp. Gluteus medius structure and volume were assessed on MRI. The hip girdle muscle function was assessed using a hand held dynamometer, surface electromyography as well as quantitative gait analysis. RESULTS: Seven patients in Group 1 (50%), but none in Group 2, had persistent urological dysfunctions, in the absence of any recognized previous pathology or urologic trauma at the time of injury. No gluteal muscle demonstrated fibrosis or fatty infiltration. The median gluteal muscle volume was not significantly decreased compared with the uninjured side in either group (P=0.421). The muscle strengths of gluteus maximus, gluteus medius, tensor fasciae latae and iliopsoas when compared to the uninjured side were significantly less in Group 1 compared to Group 2. However, no patient had a discernable limp and gait analysis showed no significant differences between the left and right sides in the study and control groups in the gluteal activation timing (p=0.171 and 0.354) and duration (p=0.622 and 0.435). There were no skin complications, and no patient reported any persistent bowel dysfunction. CONCLUSION: TAE was associated with a high rate of persistent urological dysfunction. TAE could lead to decreased hip muscles strength, however this does not seem to affect gait.				
542.	Ramesh S & Ms. B. Manimegalai Patients' Satisfaction On Hospital Food Service In A Tertiary Care Hospital International Journal of Innovative Research and Advanced Studies (IJIRAS) Volume 4 Issue 5, May 2017; 138-140	**INT**	**JAN TO JUN**	**DIETARY**	**Not Indexed in PubMed**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Department of Dietetics, **Christian Medical College, Vellore** Abstract: The objective of the study is to find out the satisfaction level of patients on hospital diet. A preformatted Likert type close ended questionnaire was used to collect feedback from the patients. Feedback provides an opportunity to the patients to give their opinion about the quality of food service they receive. In this study 98% of the patients have stated that the overall quality of food was good. Guest Relation Executives play a vital role in improving patient satisfaction.				
543.	Ramesh, Mr. S. and B, Ms. Manimegalai Guest Relation Executives in Hospital Food Service of a Tertiary Care Hospital Imperial Journal of Interdisciplinary Research (IJIR).Oct 2017; 3 (10): Guest relation executives play a vital role in customer service. Introduction of Guest relation executive to patient food service in hospitals to meet the patients' diet requirement has been successful in this study. **Address:** Department of Dietetics, **Christian Medical College, Vellore** Abstract: Guest relation executives play a vital role in customer service. Introduction of Guest relation executive to patient food service in hospitals to meet the patients' diet requirement has been successful in this study.	**NAT**	**JAN TO JUN**	**DIETARY**	**Not Indexed in PubMed**
544.	Ramnath Misra1, Avinash Jain2, Dinesh Kumar3, Durga Prasanna Misra4, Anupam Guleria5, Sandeep Kumar4, Atul Rawat3, Smriti Chaurasia4, Umesh Kumar6, Abhishek Zanwar4, Durgesh Dubey7, Ruchika Goel8, Debashish Danda9 and Paul Bacon10, 1Clinical Immunology, Sanjay Gandhi Postgraduate of Medical Sciences, Lucknow, India, 2Clinical Immunology, Senior Resident, Lucknow, India, 3Centre for Biomedical Research, Lucknow, India, 4Clinical Immunology, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, India, 5Centre for Biomedical Research, DST-INSPIRE Faculty, Lucknow, India, 6Centre for Biomedical Research, Research Scholar, Lucknow, India, 7Centre for Biomedical Research, PhD Student, Lucknow, India, 8Rheumatology, **Christian Medical College, Vellore** Tamilnadu, India, 9Clinical Immunology & Rheumatology, **Christian Medical College, Vellore,** India, Vellore, India, 10Rheumatology, Emeritus Professor, Birmingham, United Kingdom NMR-Based Serum Metabolomics of Patients with Takayasu Arteritis (TA) and Relationship with Disease Activity [abstract]. Arthritis Rheumatol. 2017; 69 (suppl 10).	**INT**	**JUL TO DEC**	**CLINICAL IMMUNOLOGY & RHEUMATOLOGY**	**NO PMID** **WOS:**000411824104078 **Impact Factor:** 6.918 **H-Index:** 271

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	http://acrabstracts.org/abstract/nmr-based-serum-metabolomics-of-patients-with-takayasu-arteritis-ta-and-relationship-with-disease-activity/ Meeting: 2017 ACR/ARHP Annual Meeting Date of first publication: September 18, 2017 Background/Purpose: Takayasu arteritis (TA) is a large vessel vasculitis of unknown pathogenesis. The current serological and radiological parameters used to assess disease activity are not highly specific and there is a need for a relevant biomarker. In our previous study [1], NMR based serum metabolomics had revealed distinctive metabolic signatures in patients with TA compared to age/sex matched healthy controls and SLE [2]. In this study we investigate whether these distinctive metabolites correlate with disease activity. Methods: Patients with TA fulfilling ACR criteria were assessed for disease activity using ITAS A (ESR), with a score of ³4, considered as active. The serum metabolic profiles of active and inactive TA patients obtained with an 800 MHZ NMR spectrometer were compared using multivariate orthogonal partial least-squares discriminant analysis (OPLS-DA) to identify metabolites that related to disease activity [based on PLS-DA VIP(variable importance on projection) score >1.5 and permutation test, p-value < 0.01]. Results: 98 patients were categorized into active (45) and inactive (53) groups – median age 27 years in both groups and female to male ratio 3.5:1 and 4.9:1 respectively. The majority had class V disease. Mean duration of illness was 8.8 ± 13.2 years in active TA and 5.2 ± 5.6 years in inactive TA group. An exquisite separation in OPLS-DA score plot showed metabolic differences between active and inactive TA patients (Fig. 1A). The key metabolites with highest discriminatory potential (VIP score > 1.5) which were elevated in active TA were glutamate, N-acetyl glycoprotein (NAG), glucose, phosphoglyceride, glycerol, leucine whereas lactate, choline, low/very-low density lipoproteins (LDL/VLDL) were decreased. Receiver operating characteristic (ROC) curve analysis revealed glutamate and NAG had the highest potential to discriminate active from inactive TA (area under the curve 0.775 and 0.769 respectively (p-value<0.0001) (Fig. 1B, 1C). The spectra did not correlate with current therapy but did alter when disease activity changed on follow-up. Conclusion: This large cohort of patients revealed metabolic profiles discriminating				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	between clinically active and inactive TA patients. It suggests glutamate and NAG have strong potential as biomarkers for disease activity in TA and may serve as a guide to therapy. We are now working to further validate these results in longitudinal studies. Keywords: Biomarkers, Disease Activity, metabolomics and takayasu arteritis				
545.	Ramprasad, C., Zachariah, R., Steinhoff, M. and Simon, A. Parental attitudes towards influenza vaccination for children in South India World J Pediatr; 2017, 13 (1): 84-90 **Address:** University of Miami Miller School of Medicine, Miami, Florida, USA. chethanramprasad@gmail.com**Christian Medical College, Vellore,** Tamil Nadu, India. Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio, USA. **BACKGROUND:** The rate of influenza vaccination is low for children in India. The purpose of this study is to assess parental attitudes towards influenza vaccination in South India. **METHODS:** Participants were parents who brought their children to the Well Baby Clinic of **Christian Medical College Hospital, Vellore,** India for routine immunization. Participants answered questions by written survey while waiting for their children's vaccination. **RESULTS:** A total of 456 surveys were completed (403 parents did not opt for trivalent influenza vaccination and 53 opted for influenza vaccination). The majority (53.60%) of those parents who did not accept influenza vaccination identified the lack of a doctor's recommendation as the main reason. When asked separately, many non-acceptors (44.91%) indicated that they did not believe or were not sure that the influenza vaccine was effective. Nearly all non-acceptors (92.56%) stated that they would opt for influenza vaccination if a doctor recommended it. **CONCLUSIONS:** The most common reason that parents not opting for influenza vaccination for their children was the lack of recommendation by a doctor. The results of this study suggest that recommendation by a doctor is a more important factor than belief in efficacy, cost, or convenience in parental decision-making regarding childhood influenza vaccination in India, unlike the United States where parents are less likely to follow recommendations.	**INT**	**JAN TO JUN**	**PEDIATRICS**	**PMID:**27577192 **Impact Factor:** 1.164 **H-Index:** 22
546.	Rana, D. and Ramalingam, M.	**INT**	**JAN TO JUN**	**CENTRE FOR STEM CELL**	**PMID:**28482469 **Impact**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Enhanced proliferation of human bone marrow derived mesenchymal stem cells on tough hydrogel substrates Mater Sci Eng C Mater Biol Appl; 2017, 76 1057-1065 **Address:** Centre for Stem Cell Research (CSCR), A unit of Institute for Stem Cell Biology and Regenerative Medicine-Bengaluru, **Christian Medical College Campus,** Vellore 632002, India. Centre for Stem Cell Research (CSCR), A unit of Institute for Stem Cell Biology and Regenerative Medicine-Bengaluru, **Christian Medical College Campus,** Vellore 632002, India; WPI-Advanced Institute for Materials Research, Tohoku University, Sendai 980-8577, Japan. Electronic **Address:** rmurug2000@gmail.com Stem cell plays a significant role in tissue engineering and regenerative medicine. However, one of the major limitations in translation of stem cell technologies for clinical applications is limited cell survival and growth upon implantation. To address this limitation, authors have made an attempt to design polyacrylamide/alginate (PAAm/Algi) based tough hydrogel substrates and studied their impact on the survival and proliferation of human bone marrow-derived mesenchymal stem cells (hBMSCs). The PAAm/Algi hydrogel substrates have been prepared by initiator-induced free radical polymerization with mechanical properties quite similar to human soft tissues. To evaluate the efficacy of hydrogel substrates in support of cellular functions, hBMSCs were cultured on the PAAm/Algi hydrogel substrate (Gel system) and conventional tissue culture plate (TcP system) under defined conditions. The results of this study demonstrated that the cells cultured on the Gel and TcP systems showed 80-90% of cell viability throughout the period of study. The cells cultured on the Gel system showed 25% increase in proliferation after 7days of culture, whereas the TcP system showed only an increase of 10%. These results confirm the cellular compatibility and enhanced cell proliferative nature of the hydrogel substrates, due the fact that the hydrogel substrates provided necessary microenvironmental cues to the cells as compared the conventional TcP system. The overall results suggest that the PAAm/Algi based hydrogels could be used as a potential substrate for hBMSCs culture and expansion.			**RESEARCH**	**Factor:**4.164 **H-Index:** 89
547.	Rana, D., Zreiqat, H., Benkirane-Jessel, N., Ramakrishna, S. and Ramalingam, M. Development of decellularized scaffolds for stem cell-driven tissue engineering	**INT**	**JAN TO JUN**	**CENTRE FOR STEM CELL RESEARCH**	**PMID:**26119160 **Impact Factor:** 3.989

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	J Tissue Eng Regen Med; 2017, 11 (4): 942-965 **Address:** Centre for Stem Cell Research (CSCR), Institute for Stem Cell Biology and Regenerative Medicine (Bengaluru) **Christian Medical College Campus,** Vellore, India.Biomaterials and Tissue Engineering Research Unit, Faculty of Engineering and Bosch Institute, University of Sydney, NSW, Australia. INSERM, Osteoarticular and Dental Regenerative Nanomedicine Laboratory, UMR 1109, Faculte de Medecine, Strasbourg, France. Centre for Nanofibres and Nanotechnology, Department of Mechanical Engineering, National University of Singapore. WPI Advanced Institute for Materials Research, Tohoku University, Sendai, Japan. Organ transplantation is an effective treatment for chronic organ dysfunctioning conditions. However, a dearth of available donor organs for transplantation leads to the death of numerous patients waiting for a suitable organ donor. The potential of decellularized scaffolds, derived from native tissues or organs in the form of scaffolds has been evolved as a promising approach in tissue-regenerative medicine for translating functional organ replacements. In recent years, donor organs, such as heart, liver, lung and kidneys, have been reported to provide acellular extracellular matrix (ECM)-based scaffolds through the process called 'decellularization' and proved to show the potential of recellularization with selected cell populations, particularly with stem cells. In fact, decellularized stem cell matrix (DSCM) has also emerged as a potent biological scaffold for controlling stem cell fate and function during tissue organization. Despite the proven potential of decellularized scaffolds in tissue engineering, the molecular mechanism responsible for stem cell interactions with decellularized scaffolds is still unclear. Stem cells interact with, and respond to, various signals/cues emanating from their ECM. The ability to harness the regenerative potential of stem cells via decellularized ECM-based scaffolds has promising implications for tissue-regenerative medicine. Keeping these points in view, this article reviews the current status of decellularized scaffolds for stem cells, with particular focus on: (a) concept and various methods of decellularization; (b) interaction of stem cells with decellularized scaffolds; (c) current recellularization strategies, with associated challenges; and (iv) applications of the decellularized scaffolds in stem cell-driven tissue engineering and regenerative medicine. Copyright (c) 2015 John Wiley & Sons, Ltd.				**H-Index:** 50
548.	Ranganathan, D., John, G., Yeoh, E., Williams, N., O'loughlin, B., Han, T.,	**INT**	**JAN TO**	**BIOSTATISTI**	**PMID:**28408711

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Jeyaseelan, L., Kavitha, R. and Healy, H. A RANDOMIZED CONTROLLED TRIAL TO DETERMINE THE APPROPRIATE TIME TO INITIATE PERITONEAL DIALYSIS AFTER INSERTION OF CATHETER (TIMELY PD STUDY) Peritoneal Dialysis International; 2017, 37 (4): 420-428 **Address:** Renal Medicine, Royal Brisbane and Women's Hospital, Brisbane, Australia dwarakanathan.ranganathan@health.qld.gov.au Renal, Royal Brisbane and Women\'s Hospital, Herston, Australia. Renal Medicine, Royal Brisbane and Women\'s Hospital, Brisbane, Australia. General Surgery, Royal Brisbane and Women\'s Hospital, Herston, Australia. Renal, Rockhampton Hospital, Rockhampton, Australia. Biostatistics, **Christian Medical College and Hospital** Vellore, Vellore, India. **BACKGROUND:** The optimal time for the commencement of peritoneal dialysis (PD) after PD catheter insertion is unclear. If dialysis is started too soon after insertion, dialysate leaks and infection could occur. However, by starting PD earlier, morbidity and costs can be reduced through lesser hemodialysis requirements. This is the first randomized controlled trial to determine the safest and shortest interval to commence PD after catheter insertion. diamond**METHODS:** All consecutive patients undergoing PD catheter insertion at the Royal Brisbane and Women's Hospital and Rockhampton Hospital from 1 March 2008 to 31 May 2013 who met the inclusion and exclusion criteria were invited to participate in the trial. Participants were randomized to 1 of 3 groups. Group 1 (G1) commenced PD at 1 week, group 2 (G2) at 2 weeks and group 3 (G3) at 4 weeks after PD catheter insertion. These groups were stratified by hospital and the presence of diabetes. Primary outcomes were the incidence of peritoneal fluid leaks or PD-related infection during the 4 weeks after commencement of PD. diamond **RESULTS:** In total 122 participants were recruited, 39, 42, and 41 randomized to G1, G2, and G3, respectively. The primary outcome catheter leak was significantly higher in G1 (28.2%) compared with G3 (2.4%, p = 0.001) but not compared with G2 (9.5%, p = 0.044), based on intention to treat analysis. These differences were even more marked when analyzed with per protocol **METHOD:** G1 had a significantly higher percentage (32.4 %) compared with G3 (3.3%, p = 0.003) but not compared with G2 (10.5%, p = 0.040). Event percentages of leak were statistically higher in G1		**JUN**	**CS**	**Impact Factor:** 1.557 **H-Index:** 74

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	and occurred significantly earlier compared with other groups (p = 0.002). Amongst diabetics, technique failure was significantly higher (28.6%) in G3 compared with 0% in G1 and 7.1% in G2 (p = 0.036) and earlier in G3 at 163.2 days vs 176.8 and 175.8 (p = 0.037) for G1 and G2, respectively. diamond **CONCLUSION:** Leaks were higher in participants commencing PD at 1 week after catheter insertion compared with the other 2 groups, and technique failure was higher in diabetics starting PD at 4 weeks.				
549.	Rani, S. B., Balamurugan, R. and Ramakrishna, B. S. Molecular analysis of the human faecal archaea in a southern Indian population J Biosci; 2017, 42 (1): 113-119 **Address:** The Wellcome Trust Research Laboratory, **Christian Medical College, Vellore** 632 004, India. Archaea are an important constituent of the human gut microbiota, but there is no information on human gut archaea in an Indian population. In this study, faecal samples were obtained from different age groups (neonatal babies, preschool children, school-going children, adolescents, adults and elderly) of a southern Indian population, and from a tribal population also resident in southern India). 16S rRNA gene sequences specific to Archaea were amplified from pooled faecal DNA in each group, sequenced, and aligned against the NCBI database. Of the 806 adequate sequences in the study, most aligned with 22 known sequences. There were 9 novel sequences in the present study. All sequences were deposited in the GenBank nucleotide sequence database with the following accession numbers: KF607113 - KF607918. Methanobrevibacter was the most prevalent genus among all the age groups accounting for 98% in neonates, 96% in post-weaning, and 100% each in preschool, school and adult population. In the elderly, Methanobrevibacter accounted for 96% and in tribal adults, 99% of the clones belonged to Methanobrevibacter genus. Other genera detected included Caldisphaera, Halobaculum, Methanosphaera and Thermogymnomonas. Methanobrevibacter smithii predominated in all age groups, accounting for 749 (92.9%) of the 806 sequences. Archaea can be found in the faeces of southern Indian residents immediately after birth. Methanobrevibacter smithii was the dominant faecal archeon in all age groups, with other genera being found at the extremes of age.	**INT**	**JAN TO JUN**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28229970 **Impact Factor:** 1.422 **H-Index:** 59

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
550.	Ranjalkar, J., Mathew, S. K., Verghese, V. P., Bose, A., Rose, W., Gupta, D., Fleming, D. H. and Mathew, B. S. Isoniazid and rifampicin concentrations in children with tuberculosis, on either daily or intermittent regimen - implications for the revised RNTCP 2012 doses, in India Int J Antimicrob Agents; 2017, **Address:** Department of Pharmacology and Clinical Pharmacology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Child Health, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Community Health and Development, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Pharmacology and Clinical Pharmacology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Electronic address: binusphilip@gmail.com. BACKGROUND: Sub-optimal plasma drug concentrations of Anti-Tubercular Therapy (ATT) could lead to delayed response and emergence of acquired drug-resistance. OBJECTIVES: To determine and compare the plasma concentrations of isoniazid and rifampicin in children treated for tuberculosis (TB) on daily or intermittent ATT regimen. To study the effect of the exposure of isoniazid and rifampicin on clinical outcome at the end of therapy. METHODS: Forty-one children aged 2 to 16 years, initiated on either daily or three-times a week (intermittent) ATT regimen were recruited into the study. Towards the end of the intensive phase, blood specimens were collected pre-dose, followed by 05, 1, 15, 2, 25, 4 and 6 hours post-dose, and concentrations of isoniazid and rifampicin were analyzed using validated Liquid Chromatography-Mass Spectrometry (LC-MS/MS) and High-Performance Liquid Chromatography (HPLC) assays, respectively. The Cmax (maximum plasma concentration), AUC0-6h, and treatment outcome were determined. RESULTS AND CONCLUSION: Ninety-three percent of the patients had an isoniazid Cmax above 3 microg/mL. Seventy-seven percent of the patients had a rifampicin Cmax below 8 microg/mL, and 28% of the patients had a rifampicin AUC0-24h less than 13 mg.hr/L. The exposure of isoniazid and rifampicin was not different between daily and intermittent ATT regimens, on the day of administration. All the children had a favourable outcome at the end of therapy. Since 77% children had low exposure to rifampicin, the authors recommend the routine use of therapeutic drug monitoring to prevent relapse and also to support the implementation of the Revised National Tuberculosis Control Programme 2012	**INT**	**JUL TO DEC**	**PHARMACOLOGY AND CLINICAL PHARMACOLOGY, CHILD HEALTH, COMMUNITY HEALTH**	**PMID:**29241821 **Impact Factor:** 4.307 **H-Index:** 102

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	doses.				
551.	Rathi, A. and Rathi, S. Relative imbalance as etiology of laryngomalacia - A new theory Med Hypotheses; 2017, 98 38-41 **Address:** Department of Otolaryngology and Head & Neck Surgery, **Christian Medical College, Vellore,** India. Electronic **Address:** alokrathi14@gmail.com. Department of Oculoplasty, LV Prasad Eye Institute, Hyderabad, India. Laryngomalacia literally means weak larynx. It is the most common cause of noisy breathing in infants and children constituting around 70% of cases. Its aetiology is not clear and various theories are proposed. Treatment remains following the child with regular weight monitoring in view of expected spontaneous resolution. However we cannot predict which child will resolve spontaneously and which child may need surgical intervention. We propose a new theory based on relative imbalance of demand supply of air, suggesting the increase in demand causing turbulent airflow, increasing suction pressure and causing collapse of laryngeal structures. This theory also helps us in predicting early, which child will resolve spontaneously and which child will need surgery. The methodology to evaluate hypothesis along with techniques and tools are also suggested.	**INT**	**JAN TO JUN**	**OTOLARYNGOLOGY AND HEAD & NECK SURGERY**	**PMID:**28012601 **Impact Factor:** 1.066 **H-Index:** 71
552.	Ravikar Ralph, MD1; Riddhi Das Gupta, MD, DM (Endo)1; Ari G. Chacko, MCh (Neurosurg)2; Geeta Chacko, MD3; Nihal Thomas, MD, DNB, MNAMS, FRCP (Edin, Glas, Lond), PhD1 Growth Hormone secreting pituitary carcinoma presenting with isolated leptomeningeal involvement: A challenging diagnosis. AACE CLINICAL CASE REPORTS Vol 3 No. 1 Winter 2017: e12 –e16 **Address:** 1.Department of Endocrinology, 2.Department of Neurosurgery and 3.Department of Pathology, Christian Medical College Hospital, Vellore, India. **Address correspondence** to Prof. Nihal Thomas, Department of Endocrinology, Christian Medical College Hospital, Vellore, India. E-mail: nihal_thomas@yahoo.com. DOI: 10.4158/EP15987.CR Objective: To raise awareness of the clinical presentation of growth hormone (GH)-	**INT**	**JUL TO DEC**	**ENDOCRINOLOGY**	**Indexed in PubMed**

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	producing pituitary carcinoma and its unique clinical presentation. Methods: A case report of a GH-secreting pituitary carcinoma with predominant leptomeningeal spread presenting as persistent acromegaly post–macroadenoma excision and radiation therapy. Results: A 39-year-old male, diagnosed with a GH-secreting pituitary macroadenoma with acromegaly 3 years prior, presented with persisting acromegalic phenotypic features with associated diabetes mellitus and hypertension. He had undergone an endoscopic transnasal, transsphenoidal adenoma resection, followed 3 months later by conventional cranial irradiation at another center 2 years prior to his current presentation to us. Serum insulin-like growth factor 1 and post 1-hour 100-g oral glucose administration serum GH levels were 1,198 and 393 ng/mL, respectively. Magnetic resonance imaging of the brain with spine screening revealed an empty sella, diffuse enhancing cordal, posterior fossa and cauda-equina leptomeningeal thickening, suggesting lepto-meningeal spread of a primary neoplastic process. Cytologic examination of cerebrospinal fluid revealed GH-immunopositive malignant cells with pancytokeratin negativity. A diagnosis of GH-secreting pituitary carcinoma with leptomeningeal dissemination was made. He was initiated on intermittent short-acting subcutaneous octreotide and systemic chemotherapy with temozolamide 200 mg/m2 for 5 consecutive days every 28-days and concomitant skull and spine irradiation (total dose of 36 Grays in 20 fractions). His metabolic parameters improved following 3 cycles of chemotherapy. Interval assessment of disease status is awaited prior to the fourth temozolamide cycle. Conclusion: Pituitary carcinomas are rare. Clinicobiochemical presentation being indistinguishable from that of an adenoma, demonstration of metastasis is essential for diagnosis. Isolated leptomeningeal presentation is a unique presentation of GH-secreting pituitary carcinomas. ***(AACE Clinical Case Rep. 2017;3:e12-e16)***				
553.	Ravikumar, K., Sadacharan, D., Muthukumar, S., Sundarram, T., Periyasamy, S. and Suresh, R. V. A Prospective Study on Role of Supplemental Oral Calcium and Vitamin D in Prevention of Postthyroidectomy Hypocalcemia Indian J Endocrinol Metab; 2017, 21 (4): 498-503 **Address:** Department of Endocrine Surgery, **Christian Medical College, Vellore,** Chennai, Tamil Nadu, India. Department of Endocrine Surgery, Madras Medical College, Chennai, Tamil Nadu, India. Department of Endocrine Surgery, Madurai Medical College, Madurai, Tamil Nadu,	**NAT**	**JUL TO DEC**	**ENDOCRINE SURGERY**	**PMID:**28670529 **PMCID:**5477433 **Impact Factor:** NA **H-Index:** 7

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	India. BACKGROUND: Postoperative transient hypocalcemia is sequelae of total thyroidectomy (TT), which is observed in up to 50% of patients. Routine oral calcium and Vitamin D supplementation have been proposed to prevent symptomatic hypocalcemia preventing morbidity and facilitating early discharge. PATIENTS AND METHODS: A total of 208 patients with nontoxic benign thyroid disorders, undergoing TT, were serially randomized into four groups: Group A (no supplements were given), Group B (oral calcium - 2 g/day given), Group C (calcium and calcitriol - 1 mcg/day are given), and Group D (calcium, calcitriol, and cholecalciferol - 60,000 IU/day are given). Patients were monitored for clinical and biochemical hypocalcemia (serum calcium, [Sr. Ca] <8 mg/dl), along with serum intact parathormone (Sr. PTH) and magnesium 6 h after surgery and Sr. Ca every 24 h. Intravenous (IV) calcium infusion was started, if any of the above four groups exhibit frank hypocalcemia. Patients are followed up with Sr. Ca and Sr. PTH at 3 and 6 months. RESULTS: All groups were age and sex matched. Hypocalcemia was observed in 72/208 (34.61%) cases. Incidence of hypocalcemia was higher in Group A (57.69%) and Group B (50%) compared to Group C (15.38%) and Group D (15.38%). Hypocalcemia necessitating IV calcium occurred in 31/208 (14.90%) patients. IV calcium requirement exceeded in Group A (26.92%) and Group B (23.07%) compared to Group C (5.76%) and Group D (3.84%). There was no statistical difference in basal levels of serum Vitamin D, calcium, magnesium, intact PTH, and 6 h after surgery. Permanent hypoparathyroidism developed in five patients on follow-up. CONCLUSION: Routine postoperative supplementation of oral calcium and Vitamin D will help in the prevention of postthyroidectomy transient hypocalcemia significantly. Preoperative Vitamin D levels do not predict postoperative hypocalcemia.				
554.	Reddy, N. M., Malve, H., Nerli, R., Venkatesh, P., Agarwal, I. and Rege, V. Nocturnal Enuresis in India: Are We Diagnosing and Managing Correctly? Indian J Nephrol; 2017, 27 (6): 417-426 **Address:** Department of Urology, Rainbow Hospitals, Hyderabad, Telangana, India. Medical Affairs, Ferring Pharmaceuticals Pvt. Ltd., Mumbai, Maharashtra, India. Department of Urology, KLES Kidney Foundation, KLES Dr. Prabhakar Kore Hospital and MRC, Belgaum, India.	**NAT**	**JUL TO DEC**	**CHILD HEALTH UNIT II**	**PMID:**29217876 **PMCID:**5704404 **Impact Factor:** 2.153 **H-Index:** 14

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Pediatric Urology, NU Hospitals, Bengaluru, Karnataka, India. Department of Child Health Unit II, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Pediatric Urology, Wadia Hospital for Children, Mumbai, Maharashtra, India. Nocturnal enuresis is a common problem affecting school-aged children worldwide. Although it has significant impact on child's psychology, it is always under-recognized in India and considered as a condition which will outgrow with advancing age. Nocturnal enuresis classified as primary or secondary and monosymptomatic or nonmonosymptomatic. Factors that cause enuresis include genetic factors, bladder dysfunction, psychological factors, and inappropriate antidiuretic hormone secretion, leading to nocturnal polyuria. Diagnosis consists of detailed medical history, clinical examination, frequency-volume charts, and appropriate investigations. The frequency-volume chart or voiding diary helps in establishing diagnosis and tailoring therapy. The first step in treating nocturnal enuresis is to counsel the parents and the affected child about the condition and reassure them that it can be cured. One of the effective strategies to manage enuresis is alarm therapy, but currently, it is not easily available in India. Desmopressin has been used in the treatment of nocturnal enuresis for close to 50 years. It provides an effective and safe option for the management of nocturnal enuresis. This review covers the diagnosis and management of nocturnal enuresis and introduces the concept of "bedwetting clinics" in India, which should help clinicians in the thorough investigation of bedwetting cases.				
555.	Reitsma, Marissa B., Fullman, Nancy, Ng, Marie, Salama, Joseph S., Abajobir, Amanuel, Abate, Kalkidan Hassen, Abbafati, Cristiana, Abera, Semaw Ferede, Abraham, Biju, Abyu, Gebre Yitayih, Adebiyi, Akindele Olupelumi, Al-Aly, Ziyad, Aleman, Alicia V., Ali, Raghib, Al Alkerwi, Ala'a, Allebeck, Peter, Al-Raddadi, Rajaa Mohammad, Amare, Azmeraw T., Amberbir, Alemayehu, Ammar, Walid, Amrock, Stephen Marc, Antonio, Carl Abelardo T., Asayesh, Hamid, Atnafu, Niguse Tadela, Azzopardi, Peter, Banerjee, Amitava, Barac, Aleksandra, Barrientos-Gutierrez, Tonatiuh, Basto-Abreu, Ana Cristina, Bazargan-Hejazi, Shahrzad, Bedi, Neeraj, Bell, Brent, Bello, Aminu K., Bensenor, Isabela M., Beyene, Addisu Shunu, Bhala, Neeraj, Biryukov, Stan, Bolt, Kaylin, Brenner, Hermann, Butt, Zahid, Cavalleri, Fiorella, Cercy, Kelly, Chen, Honglei, Christopher, Devasahayam Jesudas, Ciobanu, Liliana G., Colistro, Valentina, Colomar, Mercedes, Cornaby, Leslie, Dai, Xiaochen,	**INT**	**JUL TO DEC**	**PULMONARY MEDICINE**	**PMID:**28390697 **PMCID:** **PMC**5439023 **WOS:**000400973500025 **Impact Factor:** 47.831 **H-Index:** 646

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Damtew, Solomon Abrha, Dandona, Lalit, Dandona, Rakhi, Dansereau, Emily, Davletov, Kairat, Dayama, Anand, Degfie, Tizta Tilahun, Deribew, Amare, Dharmaratne, Samath D., Dimtsu, Balem Demtsu, Doyle, Kerrie E., Endries, Aman Yesuf, Ermakov, Sergey Petrovich, Estep, Kara, Faraon, Emerito Jose Aquino, Farzadfar, Farshad, Feigin, Valery L., Feigl, Andrea B., Fischer, Florian, Friedman, Joseph, Ghiwot, Tsegaye Tewelde, Gall, Seana L., Gao, Wayne, Gillum, Richard F., Gold, Audra L., Gopalani, Sameer Vali, Gotay, Carolyn C., Gupta, Rahul, Gupta, Rajeev, Gupta, Vipin, Hamadeh, Randah Ribhi, Hankey, Graeme, Harb, Hilda L., Hay, Simon I., Horino, Masako, Horita, Nobuyuki, Hosgood, H. Dean, Husseini, Abdullatif, Ileanu, Bogdan Vasile, Islami, Farhad, Jiang, Guohong, Jiang, Ying, Jonas, Jost B., Kabir, Zubair, Kamal, Ritul, Kasaeian, Amir, Kesavachandran, Chandrasekharan Nair, Khader, Yousef S., Khalil, Ibrahim, Khang, Young-Ho, Khera, Sahil, Khubchandani, Jagdish, Kim, Daniel, Kim, Yun Jin, Kimokoti, Ruth W., Kinfu, Yohannes, Knibbs, Luke D., Kokubo, Yoshihiro, Kolte, Dhaval, Kopec, Jacek, Kosen, Soewarta, Kotsakis, Georgios A., Koul, Parvaiz A., Koyanagi, Ai, Krohn, Kristopher J., Krueger, Hans, Defo, Barthelemy Kuate, Bicer, Burcu Kucuk, Kulkarni, Chanda, Kumar, G. Anil, Leasher, Janet L., Lee, Alexander, Leinsalu, Mall, Li, Tong, Linn, Shai, Liu, Patrick, Liu, Shiwei, Lo, Loon-Tzian, Lopez, Alan D., Ma, Stefan, Abd El Razek, Hassan Magdy, Majeed, Azeem, Malekzadeh, Reza, Malta, Deborah Carvalho, Manamo, Wondimu Ayele, Martinez-Raga, Jose, Mekonnen, Alemayehu Berhane, Mendoza, Walter, Miller, Ted R., Mohammad, Karzan Abdulmuhsin, Morawska, Lidia, Musa, Kamarul Imran, Nagel, Gabriele, Neupane, Sudan Prasad, Quyen, Nguyen, Nguyen, Grant, Oh, In-Hwan, Oyekale, Abayomi Samuel, Mahesh, P. A., Pana, Adrian, Park, Eun-Kee, Patil, Snehal T., Patton, George C., Pedro, Joao, Qorbani, Mostafa, Rafay, Anwar, Rahman, Mahfuzar, Rai, Rajesh Kumar, Ram, Usha, Ranabhat, Chhabi Lal, Refaat, Amany H., Reinig, Nickolas, Roba, Hirbo Shore, Rodriguez, Alina, Roman, Yesenia, Roth, Gregory, Roy, Ambuj, Sagar, Rajesh, Salomon, Joshua, Sanabria, Juan, Santos, Itamar De Souza, Sartorius, Benn, Satpathy, Maheswar, Sawhney, Monika, Sawyer, Susan, Saylan, Mete, Schaub, Michael P., Schluger, Neil, Schutte, Aletta Elisabeth, Sepanlou, Sadaf G., Serdar, Berrin, Shaikh, Masood Ali, She, Jun, Shin, Min-Jeong, Shiri, Rahman, Shishani, Kawkab, Shiue, Ivy, Sigfusdottir, Inga Dora, Silverberg, Jonathan I., Singh, Jasvinder, Singh, Virendra, Slepak, Erica Leigh, Soneji, Samir, Soriano, Joan B., Soshnikov, Sergey, Sreeramareddy, Chandrashekhar T., Stein, Dan J., Stranges, Saverio, Subart, Michelle L., Swaminathan, Soumya, Szoeke, Cassandra E. I., Tefera, Worku Mekonnen, Topor-Madry, Roman, Tran, Bach, Tsilimparis, Nikolaos, Tymeson, Hayley, Ukwaja, Kingsley Nnanna, Updike, Rachel,				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Uthman, Olalekan A., Violante, Francesco Saverio, Vladimirov, Sergey K., Vlassov, Vasiliy, Vollset, Stein Emil, Vos, Theo, Weiderpass, Elisabete, Wen, Chi-Pan, Werdecker, Andrea, Wilson, Shelley, Wubshet, Mamo, Xiao, Lin, Yakob, Bereket, Yano, Yuichiro, Ye, Penpeng, Yonemoto, Naohiro, Yoon, Seok-Jun, Younis, Mustafa Z., Yu, Chuanhua, Zaidi, Zoubida, Zaki, Maysaa El Sayed, Zhang, Anthony Lin, Zipkin, Ben, Murray, Christopher J. L., Forouzanfar, Mohammad H., Gakidou, Emmanuela and Collaborators, G. B. D. Tobacco Smoking prevalence and attributable disease burden in 195 countries and territories, 1990-2015: a systematic analysis from the Global Burden of Disease Study 2015 Lancet; 2017, 389 (10082): 1885-1906 Background The scale-up of tobacco control, especially after the adoption of the Framework Convention for Tobacco Control, is a major public health success story. Nonetheless, smoking remains a leading risk for early death and disability worldwide, and therefore continues to require sustained political commitment. The Global Burden of Diseases, Injuries, and Risk Factors Study (GBD) offers a robust platform through which global, regional, and national progress toward achieving smoking-related targets can be assessed. Methods We synthesised 2818 data sources with spatiotemporal Gaussian process regression and produced estimates of daily smoking prevalence by sex, age group, and year for 195 countries and territories from 1990 to 2015. We analysed 38 risk-outcome pairs to generate estimates of smoking-attributable mortality and disease burden, as measured by disability-adjusted life-years (DALYs). We then performed a cohort analysis of smoking prevalence by birth-year cohort to better understand temporal age patterns in smoking. We also did a decomposition analysis, in which we parsed out changes in all-cause smoking-attributable DALYs due to changes in population growth, population ageing, smoking prevalence, and risk-deleted DALY rates. Finally, we explored results by level of development using the Socio-demographic Index (SDI). Findings Worldwide, the age-standardised prevalence of daily smoking was 25.0% (95% uncertainty interval [UI] 24.2-25.7) for men and 5.4% (5.1-5.7) for women, representing 28.4% (25.8-31.1) and 34.4% (29.4-38.6) reductions, respectively, since 1990. A greater percentage of countries and territories achieved significant annualised rates of decline in smoking prevalence from 1990 to 2005 than in between 2005 and 2015; however, only four countries had significant annualised increases in smoking prevalence between 2005 and				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	2015 (Congo [Brazzaville] and Azerbaijan for men and Kuwait and Timor-Leste for women). In 2015, 11.5% of global deaths (6.4 million [95% UI 5.7-7.0 million]) were attributable to smoking worldwide, of which 52.2% took place in four countries (China, India, the USA, and Russia). Smoking was ranked among the five leading risk factors by DALYs in 109 countries and territories in 2015, rising from 88 geographies in 1990. In terms of birth cohorts, male smoking prevalence followed similar age patterns across levels of SDI, whereas much more heterogeneity was found in age patterns for female smokers by level of development. While smoking prevalence and risk-deleted DALY rates mostly decreased by sex and SDI quintile, population growth, population ageing, or a combination of both, drove rises in overall smoking-attributable DALYs in low-SDI to middle-SDI geographies between 2005 and 2015. Interpretation The pace of progress in reducing smoking prevalence has been heterogeneous across geographies, development status, and sex, and as highlighted by more recent trends, maintaining past rates of decline should not be taken for granted, especially in women and in low-SDI to middle-SDI countries. Beyond the effect of the tobacco industry and societal mores, a crucial challenge facing tobacco control initiatives is that demographic forces are poised to heighten smoking's global toll, unless progress in preventing initiation and promoting cessation can be substantially accelerated. Greater success in tobacco control is possible but requires effective, comprehensive, and adequately implemented and enforced policies, which might in turn require global and national levels of political commitment beyond what has been achieved during the past 25 years.				
556.	Revanappa, K. K., Moorthy, R. K., Alexander, M. and Rajshekhar, V. Recovery of sympathetic skin response after central corpectomy in patients with moderate and severe cervical spondylotic myelopathy Br J Neurosurg; 2017, 31 (2): 199-204 **Address:** a Department of Neurological Sciences, **Christian Medical College, Vellore,** India. **BACKGROUND:** There are sparse data on the recovery of sympathetic skin response (SSR) following decompressive surgery in patients with cervical spondylotic myelopathy (CSM). We designed a study to assess SSR in patients with	**INT**	**JAN TO JUN**	**NEUROLOGICAL SCIENCES**	**PMID:**27416074 **Impact Factor:** 1.051 **H-Index:** 54

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	moderate and severe (Nurick grades 3, 4 and 5) CSM, and its recovery following central corpectomy (CC). **METHOD:** We conducted a prospective study on 19 patients with moderate and severe CSM who underwent CC from June 2008 to December 2010. Autonomic dysfunction was defined as the presence of 'bladder dysfunction' or 'orthostatic hypotension'. All patients underwent SSR test preoperatively and at follow-up. Functional evaluation was done using Nurick grade and modified Japanese Orthopedic Association (mJOA) score preoperatively and at follow-up. FINDINGS: In the preoperative assessment, 14 of 19 (73.7%) patients had bladder dysfunction and orthostatic hypotension. SSR was absent in 13 (68.4%) patients preoperatively. At a mean follow-up of 14.5 months after CC, SSR was present in 12 of the 14 patients available for follow-up. SSR returned postoperatively in 9 of the 11 patients in whom it was absent preoperatively. Recovery of SSR postoperatively had significant correlation with improvement in Nurick grade (p =0.02), improvement in lower limb component of mJOA score (p =0.001) and Nurick grade recovery rate (p = 0.008). **CONCLUSIONS:** Dysfunction of the autonomic pathways as determined by the SSR is seen in nearly 70% of patients with moderate and severe CSM but did not correlate with other autonomic functions, suggesting possibly different pathways for different autonomic functions. Following uninstrumented CC, SSR returned in almost 80% of patients in whom it was absent preoperatively and this correlated significantly with improvement in functional grade. Decompressive surgery can reverse autonomic dysfunction in most of these patients.				
557.	Riddell, M. A., Edwards, N., Thompson, S. R., Bernabe-Ortiz, A., Praveen, D., Johnson, C., Kengne, A. P., Liu, P., Mccready, T., Ng, E., Nieuwlaat, R., Ovbiagele, B., Owolabi, M., Peiris, D., Thrift, A. G., Tobe, S., Yusoff, K., De Villiers, A., He, F., Macgregor, G., Jan, S., Neal, B., Chow, C., Joshi, R., Macmahon, S., Patel, A., Rodgers, A., Webster, R., Keat, N. K., Attaran, A., Mills, E., Muldoon, K., Yaya, S., Featherstone, A., Mukasa, B., Forrest, J., Kalyesubula, R., Kamwesiga, J., Lopez, P. C., Tayari, J. C., Lopez, P., Casas, J. L., Mckee, M., Zainal, A. O., Yusuf, S., Campbell, N., Kilonzo, K., Marr, M., Yeates, K., Feng, X., Yuan, J., Li, X., Lin, C. P., Yan, L., Zhang, J., Wu, Y., Ma, J., Wang, H., Ma, Y., Nowson, C., Moodie, M., Goudge, J., Kabudula, C., Limbani, F., Masilela, N., Myakayaka, N., Gómez-Olivé, F. X., Thorogood, M., Arabshahi, S., Evans, R., Mahal, A., Oldenburg, B., Riddell, M., Srikanth, V., Heritier, S., Kalyanram, K., Kartik, K., Suresh, O., Maulik, P., Salam, A., Sudhir, T., Thankappan, K., Thirunavukkarasu, S., Varma, R., **Thomas, N**., Clifford, G., Prabhakaran, D., Thom, S., Shivashankar, R., Mohan, S., Reddy, K. S., Krishnan, A., Faletoese, S., Ieremia, M., Ulberg, C., Viali, S., Pillay, A.,	**INT**	**JUL TO DEC**	**ENDOCRINOLOGY**	**PMID:**28298233 **PMC ID:**5353794 **SCOPUS** **Impact Factor:** 2.536 **H-Index:** 35

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Sukhu, A., Schultz, J., Siitia, J., Snowdon, W., Antonio, Bernabe-Ortiz, Cárdenas, M. K., Gilman, R. H., Miranda, J. J., Diez-Canseco, F., Ponce-Lucero, V., Sacksteder, K., Gyamfi, J., Ogedegbe, O., Apusiga, K., Cooper, R., Ntim, M., Plange-Rhule, J., Rotich, J., Binanay, C., Finkelstein, E., Bloomfield, G., Delong, A., Hogan, J., Inui, T., Naanyu, V., Fuster, V., Horowitz, C., Kimaiyo, S., Kofler, C., Menya, D., Kamano, J. H., Vedanthan, R., Velazquez, E., Were, M., Dolan, J., Irazola, V., Krousel-Wood, M., Augustovski, F., Beratarrechea, A., Chen, J., He, J., Mills, K., Poggio, R., Rubinstein, A., Shi, L., Webber, L., Akinyemi, R., Arulogun, O., Hurst, S., Waddy, S., Warth, S., Gebregziabher, M. and Uvere, E. Developing consensus measures for global programs: Lessons from the Global Alliance for Chronic Diseases Hypertension research program Globalization and Health; 2017, 13 (1): 17 **Address:** Monash University, Department of Medicine, School of Clinical Sciences at Monash Health, Melbourne, Australia University of Ottawa, School of Nursing, Faculty of Health Science, Ottawa, Canada Queen Mary University of London, London, United Kingdom Universidad Peruana Cayetano Heredia, Lima, Peru The George Institute for Global Health - India, Hyderabad, India The George Institute for Global Health - Sydney, Sydney, Australia South African Medical Research Council, Cape Town, South Africa University of Ottawa Heart Institute, Toronto, Canada Population Health Research Institute, Hamilton, Canada Medical University of South Carolina, Charleston, United States University of Ibadan, Department of Medicine, Ibadan, Nigeria University of Sydney, The George Institute for Global Health, Sydney, Australia Sunnybrook Health Sciences Center, Toronto, Canada UniversitiTeknologi MARA, Selangor, Malaysia UCSI University, Selangor, Malaysia University of Ottawa, Ottawa, Canada Mildmay Uganda, Lweza, Uganda Global Evaluative Sciences, Vancouver, Canada Makerere University, Kampala, Uganda Intra Health Rwanda, Kigali, Rwanda Universidad Autonoma de Bucaramanga, Bucaramanga, Colombia Rwanda Ministry of Health, Kigali, Rwanda				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Universidad de Santander, Bucaramanga, Colombia Instituto Nacional de Salud, Bogota, Colombia London School of Hygiene and Tropical Medicine, London, United Kingdom McMaster University, Hamilton, Canada Ministry of Health, Putrajaya, Malaysia McMaster University and Population Health Research Institute, Hamilton, Canada Libin Cardiovascular Institute of Alberta, Calgary, Canada Kilimanjaro **Christian Medical College,** Moshi, Tanzania Northern Ontario School of Medicine, Sudbury, Canada Sunnybrook Health Sciences Centre, Toronto, Canada Queen's University School of Medicine, Kingston, Canada Changzhi Medical College, Shanxi, China The George Institute for Global Health at Peking University Health Science Center, Beijing, China Peking University Health Science Center, Beijing, China Peking University School of Public Health, Beijing, China Deakin University, Melbourne, Australia University of the Witwatersrand, Johannesburg, South Africa University of Warwick, Coventry, United Kingdom Monash University, Melbourne, Australia Rishi Valley Education Centre - Rural Health, Andhra Pradesh, India The George Institute for Global Health, New Delhi, India Sree Chitra Tirunal Institute for Medical Sciences and Technology, Kerala, India **Christian Medical College vellore, Vellore, India** School of Clinical Sciences at Monash Health, Monash University, Melbourne, Australia Emory University, Atlanta, United States Public Health Foundation of India and Centre for Chronic Disease Control, New Delhi, India The George Institute for Global Health, University of Sydney, Australia Imperial College London, London, United Kingdom All India Institute of Medical Sciences, New Delhi, India Public Health Foundation of India, New Delhi, India Samoan Ministry of Health, Apia, Samoa Pacific Research Centre for the Prevention of Obesity and Noncommunicable Diseases, Suva, Fiji National Food and Nutrition Centre, Suva, Fiji				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	World Health Organization, Suva, Fiji Johns Hopkins University, Baltimore, United States Kwame Nkrumah University of Science and Technology, Kumasi, Ghana Loyola University Chicago Stritch School of Medicine, Maywood, United States New York University School of Medicine, New York, United States Duke University, Durham, United States Brown University, Providence, United States Duke University - Singapore, Singapore, Singapore Icahn School of Medicine at Mount Sinai, New York, United States Moi University, Eldoret, Kenya Indiana University, Indianapolis, United States Institute for Clinical Effectiveness and Heath Policy, Buenos Aires, Argentina Tulane University, New Orleans, United States Federal Medical Center, Abeokuta, Nigeria University of Ibadan, Ibadan, Nigeria University of California San Diego, San Diego, United States University Hospital, Lagos, Nigeria National Institute of Health, Bethesda, United States BACKGROUND: The imperative to improve global health has prompted transnational research partnerships to investigate common health issues on a larger scale. The Global Alliance for Chronic Diseases (GACD) is an alliance of national research funding agencies. To enhance research funded by GACD members, this study aimed to standardise data collection methods across the 15 GACD hypertension research teams and evaluate the uptake of these standardised measurements. Furthermore we describe concerns and difficulties associated with the data harmonisation process highlighted and debated during annual meetings of the GACD funded investigators. With these concerns and issues in mind, a working group comprising representatives from the 15 studies iteratively identified and proposed a set of common measures for inclusion in each of the teams' data collection plans. One year later all teams were asked which consensus measures had been implemented. RESULTS: Important issues were identified during the data harmonisation process relating to data ownership, sharing methodologies and ethical concerns. Measures were assessed across eight domains; demographic; dietary; clinical and anthropometric; medical history; hypertension knowledge; physical activity; behavioural (smoking and alcohol); and biochemical domains.				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Identifying validated measures relevant across a variety of settings presented some difficulties. The resulting GACD hypertension data dictionary comprises 67 consensus measures. Of the 14 responding teams, only two teams were including more than 50 consensus variables, five teams were including between 25 and 50 consensus variables and four teams were including between 6 and 24 consensus variables, one team did not provide details of the variables collected and two teams did not include any of the consensus variables as the project had already commenced or the measures were not relevant to their study. CONCLUSIONS: Deriving consensus measures across diverse research projects and contexts was challenging. The major barrier to their implementation was related to the time taken to develop and present these measures. Inclusion of consensus measures into future funding announcements would facilitate researchers integrating these measures within application protocols. We suggest that adoption of consensus measures developed here, across the field of hypertension, would help advance the science in this area, allowing for more comparable data sets and generalizable inferences.				
558.	Riddhi Dasgupta1*, Damien Cheema2 , Anna Cheema2, Mahesh D Mruthyunjaya1, Koyeli Mary Mahata3, Jyoti Panwar3, Thomas Paul1, Dukhabandhu Naik1 and Nihal Thomas1 Clinical Characteristics, Foot-Associated Risk Factors, Offloading Practices and Radiological Assessment in Patients with Type 2 Diabetes Mellitus and Chronic Charcot's Neuroarthropathy: A Case-Control Study from India. *J Global Diabetes Clin Metab*2017 Feb V-2, No 1 **Address:** 1.Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College, Vellore,** India 2. The Dudley Group NHS Foundation Trust, United Kingdom 3. Department of Radiology, **Christian Medical College, Vellore,** India	**INT**	**JAN-JUN**	**ENDOCRINOLOGY, RADIOLOGY**	Not Indexed in PubMed
559.	Rodrigues, C., Kapil, A., Sharma, A., Devanga Ragupathi, N. K., Inbanathan, F. Y., Veeraraghavan, B. and Kang, G. Whole-Genome Shotgun Sequencing of Cephalosporin-Resistant Salmonella enterica Serovar Typhi	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY, WELLCOME TRUST RESEARCH**	**PMID:**28280021 **Impact Factor:** NA **H-Index:** 14

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Genome Announc; 2017, 5 (10): **Address:** Hinduja Hospital, Mumbai, India. Department of Microbiology, AIIMS, New Delhi, India. Department of Lab Medicine, Fortis Hospital, Mohali, India.Department of Clinical Microbiology, **Christian Medical College, Vellore,** India. Department of Clinical Microbiology, **Christian Medical College, Vellore,** India vbalaji@cmcvellore.ac.in Wellcome Trust Research Laboratory and Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India. Typhoid is one of the leading causes of mortality in developing countries. Here, we report the draft genome sequences of four Salmonella enterica serovar Typhi strains isolated from bloodstream infections in a tertiary care hospital. The sequence data indicate genomes of ~4.5 Mb for all isolates, with one plasmid in each.			**LABORATORY**	
560.	Rodrigues, J., Iyyadurai, R., Sathyendra, S., Jagannati, M., Prabhakar Abhilash, K. P. and Rajan, S. J. Clinical presentation, etiology, management, and outcomes of iliopsoas abscess from a tertiary care center in South India J Family Med Prim Care; 2017, 6 (4): 836-839 Address: Department of Anaesthesia, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Introduction: Iliopsoas abscess (IPA) is the collection of pus in the iliopsoas compartment. The etiology of IPA is variable and depends on the geographical area and the antibiotic usage prevalence in that area. This study attempts to evaluate the etiology, clinical features, risk factors, management modalities, and outcomes in patients with IPA from a tertiary care center in South India. Materials and Methods: This was a retrospective study done in a tertiary care center in South India. Patient details were obtained from electronic medical records. Results: A total of 43 patients were enrolled in the study, the causative organism could be identified in 20 (46.5%) patients. The most common etiology was tuberculosis (TB). Most (23 [56.5%]) patients were treated conservatively, 20 (46.5%) patients were treated with percutaneous drainage (PCD), and 2 (4%) patients required surgery. Conclusion: The most common cause of IPA is TB. PCD was successful in 95% of the patients with complete resolution of symptoms.	**NAT**	**JUL TO DEC**	**ANAESTHESIA, MEDICINE**	**PMID:29564273** **PMC ID:5848408** **Impact Factor:** 0.670 **H-Index:** NA
561.	Rogawski, E. T., Bartelt, L. A., Platts-Mills, J. A., Seidman, J. C., Samie, A., Havt, A., Babji, S., Trigoso, D. R., Qureshi, S., Shakoor, S., Haque, R., Mduma, E., Bajracharya, S., Gaffar, S. M. A., Lima, A. A. M., Kang, G., Kosek, M. N., Ahmed, T., Svensen, E., Mason, C., Bhutta, Z. A., Lang, D. R., Gottlieb, M., Guerrant, R. L., Houpt, E. R. and Bessong, P. O.	**INT**	**JAN TO JUN**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28204556 **Impact Factor:**2.723 **H-Index:** 11

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Determinants and Impact of Giardia Infection in the First 2 Years of Life in the MAL-ED Birth Cohort J Pediatric Infect Dis Soc; 2017, 6 (2): 153-160 **Address:** Division of Infectious Diseases and International Health, University of Virginia, Charlottesville. Division of Infectious Diseases, University of North Carolina-Chapel Hill. Fogarty International Center, National Institutes of Health, Bethesda, Maryland. University of Venda, Thohoyandou, South Africa. Clinical Research Unit and Institute of Biomedicine, Federal University of Ceara, Fortaleza, Brazil. **Christian Medical College, Vellore,** India. Asociacion Benefica PRISMA, Iquitos, Peru. Aga Khan University, Karachi, Pakistan. International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh. Haydom Lutheran Hospital, Haydom, Tanzania. Walter Reed AFRIMS Research Unit Nepal, Kathmandu, Nepal. Bloomberg School of Public Health, Johns Hopkins University, Baltimore, Maryland.Haukeland University Hospital, Bergen, Norway. Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand; and. Foundation for the National Institutes of Health, Bethesda, Maryland. **Background:** Giardia are among the most common enteropathogens detected in children in low-resource settings. We describe here the epidemiology of infection with Giardia in the first 2 years of life in the Etiology, Risk Factors, and Interactions of Enteric Infections and Malnutrition and the Consequences for Child Health and Development Project (MAL-ED), a multisite birth-cohort study. Methods.: From 2089 children, 34916 stool samples collected during monthly surveillance and episodes of diarrhea were tested for Giardia using an enzyme immunoassay. We quantified the risk of Giardia detection, identified risk factors, and assessed the associations with micronutrients, markers of gut inflammation and permeability, diarrhea, and growth using multivariable linear regression. Results.: The incidence of at least 1 Giardia detection varied according to site (range, 37.7%-96.4%) and was higher in the second year of life. Exclusive breastfeeding (HR for first Giardia detection in a monthly surveillance stool sample, 0.46 [95% confidence interval (CI), 0.28-0.75]), higher socioeconomic status (HR, 0.74 [95% CI, 0.56-0.97]), and recent metronidazole treatment (risk ratio for any surveillance stool detection, 0.69 [95% CI, 0.56-0.84]) were protective. Persistence of Giardia (consecutive detections) in the first 6 months of life was associated with reduced subsequent				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	diarrheal rates in Naushahro Feroze, Pakistan but not at any other site. Giardia detection was also associated with an increased lactulose/mannitol ratio. Persistence of Giardia before 6 months of age was associated with a -0.29 (95% CI, -0.53 to -0.05) deficit in weight-for-age z score and -0.29 (95% CI, -0.64 to 0.07) deficit in length-for-age z score at 2 years. Conclusions.: Infection with Giardia occurred across epidemiological contexts, and repeated detections in 40% of the children suggest that persistent infections were common. Early persistent infection with Giardia, independent of diarrhea, might contribute to intestinal permeability and stunted growth.				
562.	Rogawski, E. T., Guerrant, R. L., Havt, A., Lima, I. F. N., Medeiros, Phqs, Seidman, J. C., Mccormick, B. J. J., Babji, S., Hariraju, D., Bodhidatta, L., Shrestha, J., Anania, J., Maro, A., Samie, A., Yori, P. P., Qureshi, S., Mahfuz, M., Bessong, P. O., Kosek, M. N., Ahmed, T., Bhutta, Z. A., Lang, D. R., Gottlieb, M., Houpt, E. R. and Lima, A. A. M. Epidemiology of enteroaggregative Escherichia coli infections and associated outcomes in the MAL-ED birth cohort PLoS Negl Trop Dis; 2017, 11 (7): e0005798 **Address:** Department of Public Health Sciences, University of Virginia, Charlottesville, Virginia, United States of America. Division of Infectious Diseases and International Health, University of Virginia, Charlottesville, Virginia, United States of America. Clinical Research Unit and Institute of Biomedicine, Federal University of Ceara, Fortaleza, Brazil. Fogarty International Center, National Institutes of Health, Bethesda, Maryland, United States of America. Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India. Department of Enteric Diseases, Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand. Walter Reed-AFRIMS Research Unit, Nepal, Kathmandu, Nepal. Haydom Global Health Research Center, Haydom Lutheran Hospital, Haydom, Tanzania. Department of Microbiology, University of Venda, Thohoyandou, South Africa. Asociacion Benefica PRISMA, Iquitos, Peru. Department of Paediatrics and Child Health, Aga Khan University, Karachi, Pakistan. Nutrition and Clinical Services Division, International Centre for Diarrhoeal Disease	**INT**	**JUL TO DEC**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28742106 **PMCID:**5542697 **Impact Factor:** 3.948 **H-Index:** 87

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Research, Dhaka, Bangladesh. Department of International Health, Bloomberg School of Public Health, Johns Hopkins University, Baltimore, Maryland, United States of America. Foundation for the National Institutes of Health, Bethesda, Maryland, United States of America. BACKGROUND: Enteroaggregative E. coli (EAEC) have been associated with mildly inflammatory diarrhea in outbreaks and in travelers and have been increasingly recognized as enteric pathogens in young children with and without overt diarrhea. We examined the risk factors for EAEC infections and their associations with environmental enteropathy biomarkers and growth outcomes over the first two years of life in eight low-resource settings of the MAL-ED study. METHODS: EAEC infections were detected by PCR gene probes for aatA and aaiC virulence traits in 27,094 non-diarrheal surveillance stools and 7,692 diarrheal stools from 2,092 children in the MAL-ED birth cohort. We identified risk factors for EAEC and estimated the associations of EAEC with diarrhea, enteropathy biomarker concentrations, and both short-term (one to three months) and long-term (to two years of age) growth. RESULTS: Overall, 9,581 samples (27.5%) were positive for EAEC, and almost all children had at least one detection (94.8%) by two years of age. Exclusive breastfeeding, higher enrollment weight, and macrolide use within the preceding 15 days were protective. Although not associated with diarrhea, EAEC infections were weakly associated with biomarkers of intestinal inflammation and more strongly with reduced length at two years of age (LAZ difference associated with high frequency of EAEC detections: -0.30, 95% CI: -0.44, -0.16). CONCLUSIONS: Asymptomatic EAEC infections were common early in life and were associated with linear growth shortfalls. Associations with intestinal inflammation were small in magnitude, but suggest a pathway for the growth impact. Increasing the duration of exclusive breastfeeding may help prevent these potentially inflammatory infections and reduce the long-term impact of early exposure to EAEC.				
563.	Rogawski, E. T., Platts-Mills, J. A., Seidman, J. C., John, S., Mahfuz, M., Ulak, M., Shrestha, S. K., Soofi, S. B., Yori, P. P., Mduma, E., Svensen, E., Ahmed, T., Lima, A. A., Bhutta, Z. A., Kosek, M. N., Lang, D. R., Gottlieb, M., Zaidi, A. K., Kang, G., Bessong, P. O., Houpt, E. R. and Guerrant, R. L.	**INT**	**JAN TO JUN**	**WELLCOME RESEARCH LABORATORY**	**PMID:**28053364 **Impact Factor:** 4.939 **H-Index:** 135

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Use of antibiotics in children younger than two years in eight countries: a prospective cohort study Bull World Health Organ; 2017, 95 (1): 49-61 **Address:** Division of Infectious Diseases and International Health, University of Virginia, PO Box 801379, Carter Harrison Research Bldg MR-6, 345 Crispell Drive, Room 2520, Charlottesville, Virginia 22908-1379, United States of America (USA).Fogarty International Center, National Institutes of Health, Bethesda, USA. **Christian Medical College, Vellore,** India. International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh. Institute of Medicine, Tribhuvan University, Kathmandu, Nepal. Walter Reed/AFRIMS Research Unit, Kathmandu, Nepal. Aga Khan University, Karachi, Pakistan. Bloomberg School of Public Health, Johns Hopkins University, Baltimore, USA. Haydom Lutheran Hospital, Haydom, United Republic of Tanzania. Haukeland University Hospital, Bergen, Norway. Clinical Research Unit and Institute of Biomedicine, Federal University of Ceara, Fortaleza, Brazil. Foundation for the National Institutes of Health, Bethesda, USA. University of Venda, Thohoyandou, South Africa. **OBJECTIVE:** To describe the frequency and factors associated with antibiotic use in early childhood, and estimate the proportion of diarrhoea and respiratory illnesses episodes treated with antibiotics. **METHODS:** Between 2009 and 2014, we followed 2134 children from eight sites in Bangladesh, Brazil, India, Nepal, Pakistan, Peru, South Africa and the United Republic of Tanzania, enrolled in the MAL-ED birth cohort study. We documented all antibiotic use from mothers' reports at twice-weekly visits over the children's first two years of life. We estimated the incidence of antibiotic use and the associations of antibiotic use with child and household characteristics. We described treatment patterns for diarrhoea and respiratory illnesses, and identified factors associated with treatment and antibiotic class. FINDINGS: Over 1 346 388 total days of observation, 16 913 courses of antibiotics were recorded (an incidence of 4.9 courses per child per year), with the highest use in South Asia. Antibiotic treatment was given for 375/499 (75.2%) episodes of bloody diarrhoea and for 4274/9661 (44.2%) episodes of diarrhoea without bloody stools. Antibiotics were used in 2384/3943 (60.5%) episodes of fieldworker-confirmed acute lower respiratory tract illness as well as in 6608/16742 (39.5%) episodes of upper respiratory illness. Penicillins were used most frequently for respiratory illness, while antibiotic classes for diarrhoea treatment varied within				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	and between sites. **CONCLUSION:** Repeated antibiotic exposure was common early in life, and treatment of non-bloody diarrhoea and non-specific respiratory illnesses was not consistent with international recommendations. Rational antibiotic use programmes may have the most impact in South Asia, where antibiotic use was highest.				
564.	Rogawski, E. T., Platts-Mills, J. A., Seidman, J. C., John, S., Mahfuz, M., Ulak, M., Shrestha, S., Soofi, S. B., Yori, P. P., Mduma, E., Svensen, E., Ahmed, T., Lima, A. A. M., Bhutta, Z., Kosek, M., Lang, D., Gottlieb, M., Zaidi, A., **Kang, G.,** Bessong, P., Houpt, E. R. and Guerrant, R. L. Early Antibiotic Exposure in Low-Resource Settings is Associated with Increased Weight in The First Two Years of Life Journal of Pediatric Gastroenterology and Nutrition; 2017, 65 (3): 350-356 **Address:** *Department of Public Health Sciences, University of Virginia, Charlottesville daggerDivision of Infectious Diseases and International Health, University of Virginia, Charlottesville double daggerFogarty International Center, National Institutes of Health, Bethesda section sign**Christian Medical College, Vellore,** India ||International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh paragraph signInstitute of Medicine, Tribhuvan University, Kathmandu, Nepal #Walter Reed/Armed Forces Research Institute of Medical Sciences Research Unit, Nepal **Center for International Health, University of Bergen, Norway daggerdaggerAga Khan University, Karachi, Pakistan, double daggerdouble daggerAsociacion Benefica PRISMA, Iquitos, Peru section sign section signBloomberg School of Public Health, Johns Hopkins University, Baltimore ||||Haydom Lutheran Hospital, Haydom, Tanzania paragraph sign paragraph signHaukeland University Hospital, Bergen, Norway ##Clinical Research Unit and Institute of Biomedicine, Federal University of Ceara, Fortaleza, Brazil ***Foundation for the National Institutes of Health, Bethesda daggerdaggerdaggerUniversity of Venda, Thohoyandou, South Africa. **OBJECTIVES:** The potential growth-promoting effects of antibiotics are not well understood among undernourished children in environments with high pathogen exposure. We aimed to assess whether early antibiotic exposure duration and class were associated with growth to two years of age across 8 low-resource sites in the MAL-ED birth cohort study. **METHODS:** We followed 1,954 children twice per week	**INT**	**JAN TO JUN**	**WELLCOME RESEARCH LABORATORY**	**PMID:**28604514 **WOS:**000408995000030 **Impact Factor:** 2.799 **H-Index:** 108

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	from birth to two years to record maternally-reported antibiotic exposures and measure anthropometry monthly. We estimated the associations between antibiotic exposure before 6 months of age and weight-for-age (WAZ) and length-for-age (LAZ) z-scores to two years. We assessed the impact of class-specific exposures and duration, and compared these results to effects of antibiotic exposures after 6 months of age. **RESULTS:** Antibiotic use before 6 months of age was associated with increased weight from 6 months to 2 years, while associations with length were less consistent across sites and antibiotic classes. Compared to unexposed children, two or more courses of metronidazole, macrolides, and cephalosporins were associated with adjusted increases in WAZ of 0.24 (95% confidence interval (CI): 0.04, 0.43), 0.23 (95% CI: 0.05, 0.42), and 0.19 (95% CI: 0.04, 0.35) from 6 months to 2 years, respectively. **CONCLUSIONS:** Antibiotic use in low-resource settings was most associated with the ponderal growth of children who had multiple exposures to antibiotics with broad spectrum and anaerobic activity in early infancy. Opportunities for rational and targeted antibiotic therapy in low resource settings may also promote short-term weight gain in children, though longer-term physical growth and metabolic impacts are unknown.This is an open access article distributed under the Creative Commons Attribution License 4.0 (CCBY), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. http://creativecommons.org/licenses/by/4.0.				
565.	Rohit Amritanand, Venkatesh Krishnan, Kenny S David, MBBS, FACS, Justin Arockiaraj Does the Surgical Reduction of High Grade Spondylolisthesis Restore Spino-Pelvic Alignment? An Analysis of 35 patients **Author Information: Christian Medical College, Vellore,** India **Journal of the American College of Surgeons,** Volume 225, Issue 4, Supplement 2, October 2017, Page e37 http://dx.doi.org/10.1016/j.jamcollsurg.2017.07.616 INTRODUCTION: The role of instrumented reduction in highgrade spondylolisthesis (HGI) is controversial. Our hypothesis is that surgical reduction at the lumbosacral segment is associated with an improvement in the overall alignment of the spine and the orientation of the pelvis facilitating an environment for fusion as well as spinal balance. METHODS: This is a retrospective case series of 35 patients with	**INT**	**JUL TO DEC**	**ORTHOPAEDICS, PAEDIATRIC ORTHOPEDICS**	**WOS:**000413319300081 **Impact Factor:** 4.307 **H-Index:** 144

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Meyerding Grade III, IV and V who underwent surgical treatment in our institution. Standing lateral radiographs from L1 vertebra to pelvis including the femoral heads before and after surgery were taken. Slip grade, pelvic incidence (PI), sacral slope (SS), pelvic tilt (PT), lumbosacral angle (LSA), and lumbar lordosis (LL) were measured. Patients were subdivided into 'Balanced' and 'Unbalanced' pelvis groups. Pre- and postoperative measurements were statistically compared to determine the influence of reduction on these spinopelvic parameters. RESULTS: Average follow-up was 3.4 years. Slip grade improved from an average 74.0% to 30.0% ($p < 0.001$). LSA reduced from 32.0 to 6.0 ($p < 0.001$). Though PT reduced, this was not significant . There was a modest favorable negative correlation between reduction in slip grade and increase in SS (r ¼ - 0.3. p 0.06). At follow-up, 5 patients improved from an unbalanced pelvis to a balanced pelvis. Osseous fusion occurred in 33 (95%) patients. CONCLUSIONS: Surgical reduction restores lumbosacral alignment in HGS which in turn has a favourable impact on fusion and spinopelvic balance				
566.	Rosario, D. P., Abraham, A., Rathore, S., Benjamin, S. J., Jeyaseelan, V. and Mathews, J. E. Digital stretching of cervix in the active phase of labour to shorten its duration: a randomised control trial Tropical Doctor; 2017, 47 (4): 312-316 **Address:** 1 Registrar, Department of Obstetrics and Gynaecology, **Christian Medical College, Vellore,** Tamil Nadu, India. 2 Associate Professor, Department of Obstetrics and Gynaecology, **Christian Medical College, Vellore,** Tamil Nadu, India. 3 Lecturer, Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India. 4 Professor, Department of Obstetrics and Gynaecology, **Christian Medical College, Vellore,** Tamil Nadu, India. An assessment of the efficacy and satisfaction of women in active labour having digital cervical stretching compared to women who did not have this intervention. Ours was a randomised controlled trial at a tertiary centre in India. Low-risk women at term with vertex presentation in active labour with ruptured membranes and cervical dilation of 4-6 cm were included. Stretching to delivery interval was 247.5 +/- 158.2 min in the intervention group and 265.5 +/- 158.4 in the control group. The mode of delivery, incidence of cervical tear, and maternal, fetal and	**INT**	**JAN TO JUN**	**OBSTETRICS AND GYNAECOLOGY V, BIOSTATISTICS**	**PMID:**28409530 **Impact Factor:**0.450 **H-Index:** 28

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	neonatal complications were similar in both groups. The Labour and Delivery Satisfaction Index (LADSI) was similar in both groups. While no significant discomfort was perceived with stretching, it does not appear to expedite labour.				
567.	Rose, J. S., Eldrina, J., Joshua, A., Amalan, S., Sebastian, T., Solomon, S. and Korah, S. Objective quantification of corneal haziness using anterior segment optical coherence tomography Journal of Current Ophthalmology; 2017, **Address:** Department of Ophthalmology, **Christian Medical College, Vellore,** India Center for Stem Cell Research, **Christian Medical College, Vellore,** India Department of Bioengineering, **Christian Medical College, Vellore,** India Department of Biostatistics, **Christian Medical College, Vellore,** India Purpose: To quantify normal corneal transparency by anterior segment optical coherence tomography (AS-OCT) by measuring the average pixel intensity. To analyze the variation in the average pixel intensity in mild and severe grades of corneal opacities. Methods: This is an observational, cross-sectional study of 38 eyes from 19 patients with mild or severe grades of corneal opacities greater than 3 mm and a normal contralateral cornea. AS-OCT was performed centered on the opacity with a 3 mm cruciate protocol. A similar image is taken of the contralateral clear cornea in the same quadrant. The average pixel intensity was calculated in a standardized manner using MATLAB software. The institutional review board approved the study (IRB Min. No: 9786). Result: The average pixel intensity of the normal cornea was 99.6 ± 10.9 [standard deviation (SD)]. The average pixel intensity of the mild and severe corneal opacities was 115.5 ± 9.1 and 141.1 ± 10.3, respectively. The differences were statistically significant. Conclusions: AS-OCT images can be used to quantify corneal transparency. Average pixel intensity is a measure that varies significantly with varying corneal opacification. © 2017 Iranian Society of Ophthalmology.	**INT**	**JUL TO DEC**	**OPHTHALMOLOGY, CENTER FOR STEM CELL RESEARCH, BIOENGINEERING, BIOSTATISTICS**	**NO PMID** **NO PMCID** **SCOPUS** **Impact Factor:** NA **H-Index:** 8
568.	Rose, Jeyanth, Wankhar, Syrpailyne, Joshua, Aarwin, Korah, Sanita and Kuriakose, Thomas An innovative model to quantify corneal transparency in donor corneal buttons South Asian Journal of Experimental Biology, UAE, 6, Jul. 2017. **Address:** Department of Ophthalmology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India	**NAT**	**JUL TO DEC**	**OPHTHALMOLOGY, BIOENGINEERING**	**Indexed in PubMed**

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Abstract: Assessment of corneal transparency in donor corneal buttons has only been performed qualitatively. The quantification of corneal transparency has implications with respect to clinical suitability of the donor cornea and research involving corneal transparency as an outcome measure. In this study an artificial anterior chamber was modified to create a central transparent passage. This was made possible by replacing the base of the chamber with Perspex and a water tight seal. An inlet and outlet tube was a ached to the sides of chamber. This was done to maintain a standardized pressure within the chamber when connected to an IV bo le. A corneal button rejected for corneal transplant was placed on the artificial anterior chamber and the chamber was filled with normal saline. A digital camera and a laser source were placed on either side of the chamber at predetermined intervals. Alignment was achieved so that the laser light passed through the center of the cornea. The image of the laser spot was acquired and subjected to image analysis. To test this proof of concept, a human cornea rejected for human transplant was injected with intrastromal saline to create corneal haze. Pre and Post injection images were analyzed. The average pixel intensity that was calculated was found to be 111 pre-saline injury and 17.2 post-saline injection. Pre and Post-saline measurement showed a marked difference in average pixel intensity. This simple inexpensive setup and ease of analysis are advantages of this method of quantification. URL: http://sajeb.org/index.php/sajeb/article/view/20287				
569.	Rose, W., Ghosh, U., Punnen, A., Sarkar, R., Prakash, J. J. A. and Verghese, V. P. Comparison of Scrub Typhus With and Without Meningitis Indian J Pediatr; 2017, 84 (11): 833-837 **Address:** Department of Pediatrics, **Christian Medical College, Vellore,** Tamil Nadu, 632004, India. winsleyrose@cmcvellore.ac.in. Department of Pediatrics, **Christian Medical College, Vellore,** Tamil Nadu, 632004, India. Wellcome Research Unit, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Microbiology, **Christian Medical College, Vellore,** Tamil Nadu, India. OBJECTIVE: To compare the children admitted with scrub typhus with and without meningitis. METHODS: All children admitted with scrub typhus over a 62 mo period were reviewed. Statistical analysis was performed to compare those with and	**NAT**	**JUL TO DEC**	**PEDIATRICS, WELLCOME RESEARCH UNIT, CLINICAL MICROBIOLOGY**	**PMID:**28674823 **Impact Factor:** 0.945 **H-Index:** 40

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	without meningitis for demographic, clinical, investigations and outcome parameters. RESULTS: Four hundred twenty seven children were admitted with scrub typhus and 63 (14.8%) had meningitis. The mean cerebrospinal fluid white blood cell (CSF WBC) count was 71 cells/cu.mm. withmean lymphocyte proportion of 92%. The mean CSF protein was 67 mg/dl and mean CSF glucose, 55 mg/dl. Of those who had meningitis, 24 (38.1%) had seizures, 17 (27%) had altered sensorium and 37 (58.7%) had nuchal rigidity. Finding an eschar, being male, breathing difficulty, and hepatomegaly were significantly more common in those without meningitis. Children with meningitis also had shorter duration of fever at presentation (median [IQR] 7 [3] days vs. 10 [4] days; p = 0.028). Headache and vomiting were significantly more common in those with meningitis. Hemoglobin and platelet were significantly lower in those without meningitis. Duration of hospitalization was significantly longer in those with meningitis, whereas acute respiratory distress syndrome (ARDS) was significantly more common in those without meningitis. There was no neurological deficit in both the groups. There was no mortality in the meningitis group compared to 3.6% mortality in the non-meningitis group (p = 0.213). CONCLUSIONS: Meningitis occurs in 15% of those with scrub typhus; those with meningitis have good neurological outcome with little mortality; those without meningitis have more complications and poorer outcome.				
570.	Ross, C., Rangarajan, S., Karimi, M., Toogeh, G. H., Apte, S., Lissitchkov, T., Acharya, S., Manco-Johnson, M. J., Srivastava, A., Brand, B., Schwartz, B., Knaub, S. and Peyvandi, F. Pharmacokinetics, clot strength and safety of a new fibrinogen concentrate: randomized comparison with active control in congenital fibrinogen deficiency J Thromb Haemost; 2017, **Address:** Department of Hematology, St. John's Medical College & Hospital, Bangalore, India. Centre For Haemostasis & Thrombosis, St. Thomas' Hospital, London, UK. Hematology Research Center, Nemazee Hospital, Shiraz University of Medical Sciences, Shiraz, Iran. Thrombosis Hemostasis Research Center, Tehran University of Medical Sciences, Tehran, Iran. Sahyadri Speciality Hospital, Pune, Maharashtra, India. Department of Hemorrhagic Diathesis and Anemia, Specialized Hospital for Active Treatment (SHAT) "Joan Pavel", Sofia, Bulgaria. Cohen Children's Medical Center of New York, Northwell Health, New Hyde Park,	**INT**	**JUL TO DEC**	**HAEMATOLOGY**	**PMID:**29220876 **Impact Factor:** 5.287 **H-Index:** 144

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	USA. Hemophilia& Thrombosis Center, University of Colorado Anschutz Medical Campus, Aurora, USA. Department of Haematology, **Christian Medical College, Vellore,** India. University Hospital Zurich, Department of Haematology, Zurich, Switzerland. Clinical Research & Development, Octapharma, Hoboken, New Jersey, USA. Research& Development Department, Octapharma, Lachen, Switzerland. Department of Medicine and Medical Specialties, IRCCS Maggiore Hospital, Mangiagalli and Regina Elena Foundation, Milan, Italy. BACKGROUND: Human fibrinogen concentrate (HFC) corrects fibrinogen deficiency in congenital a-/hypofibrinogenaemia. OBJECTIVES: To assess pharmacokinetics (PK), effects on thromboelastometry maximum clot firmness (MCF), and safety of a new double virus-inactivated/eliminated, highly purified HFC vs. active control. PATIENTS/METHODS: In this multinational, randomized, phase II, open-label, crossover study in 22 congenital afibrinogenaemia patients >/=12 years, 70 mg kg(-1) of new HFC (FIBRYGA, Octapharma AG) or control (Haemocomplettan((R)) P/RiaSTAP() , CSL Behring GmbH) were administered, followed by crossover to the other concentrate. Fibrinogen activity, PK and MCF in plasma were assessed. RESULTS: The concentrates were not bioequivalent for the primary endpoint, AUCnorm (mean ratio 1.196; 90% CI: 1.117, 1.281). Remaining PK parameters (Cmaxnorm , IVR, t1/2 , MRT) reflected bioequivalence between concentrates, except for clearance (mean ratio 0.836; 90% CI: 0.781, 0.895) and Vss (mean ratio 0.886; 90% CI: 0.791, 0.994). Mean AUCnorm was significantly larger for the new HFC (1.62 +/- 0.45 vs. 1.38 +/- 0.47 h kg g L(-1) mg(-1) , p=0.0001) and mean clearance was significantly slower (0.665 +/- 0.197 vs. 0.804 +/- 0.255 mL h(-1) kg(-1) , p=0.0002). Mean MCF increased from 0 mm to 9.68 mm (new HFC) and 10.00 mm (control) 1-hour post-infusion (mean difference -0.32 mm, 95% CI -1.70, 1.07, n.s.). No deaths, thromboses, viral seroconversions or serious related adverse events occurred. CONCLUSIONS: Bioequivalence was not demonstrated for AUCnorm , clearance and Vss. Larger AUCnorm and slower clearance were observed for the new HFC. Remaining pharmacokinetic parameters reflected bioequivalence to control. Safety profiles and increases in clot strength were comparable between concentrates. This article is protected by copyright. All rights reserved.				
571.	Roy, S., Korula, A., Basu, G., Jacob, S., Varughese, S. and Tamilarasi, V.	**INT**	**JAN TO**	**PATHOLOGY,**	**PMID:**28413416

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Immunohistochemical Glomerular Expression of Phospholipase A2 Receptor in Primary and Secondary Membranous Nephropathy: A Retrospective Study in an Indian Cohort with Clinicopathological Correlations Nephron Extra; 2017, 7 (1): 1-9 **Address:** Department of Pathology, **Christian Medical College, Vellore,** India. Department of Nephrology, **Christian Medical College, Vellore,** India. **BACKGROUND:** Limited published literature exists on the utility and standardization of anti-phospholipase A2 receptor (anti-PLA2R) immunohistochemistry (IHC) for the diagnosis of primary membranous nephropathy (MN). The study aimed to validate anti-PLA2R IHC for the diagnosis of primary MN and clinicopathological correlations in an Indian cohort. **METHODS:**Subjects included patients with primary and secondary MN diagnosed between January 2012 and August 2014 with an adequate renal biopsy and at least 1 year of clinical follow-up. Anti-PLA2R IHC was performed in all cases with miscellaneous renal lesions as controls. Electron microscopy was performed in selected cases. Sensitivity and specificity of anti-PLA2R IHC to identify primary MN was evaluated. Histopathological analyses of primary and secondary MN were done with clinicopathological correlations including serum creatinine, eGFR, chronic kidney disease stage, 24-h urine protein, serum cholesterol, serum albumin, and hypertension at presentation and follow-up, using the Kruskal-Wallis test and Spearman rank correlation. A p value of </=0.05 was considered statistically significant. **RESULTS:** In 153 MN patients (99 primary, 54 secondary) and 37 miscellaneous controls, anti-PLA2R IHC differentiated primary from secondary MN with a sensitivity of 70.2% and a specificity of 96.6%. Secondary MN had increased mesangial matrix expansion compared to primary MN (p = 0.001). Severe nephrotic syndrome, impaired renal function, and hypertension were all more common in primary than in secondary MN. **CONCLUSION:** Anti-PLA2R IHC is a specific marker to distinguish primary MN from secondary MN.		**JUN**	**NEPHROLOGY**	**Impact Factor:** NA **H-Index:** 2
572.	Rozario, Joyce, Lepcha, Anjali and Mathew, John Simultaneous labyrinthectomy and cochlear implantation for a case of otosclerosis with intractable vertigo Indian Journal of Otology 2017 Jul –Sep 23 (3) 197-199	**NAT**	**JUL TO DEC**	**ENT IV**	**Indexed in PubMed**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Department of Otology, Neurotology and Implant Otology, **Christian Medical College,** 1Department of ENT, **Christian Medical College and Hospital, Vellore,** Tamil Nadu, India **DOI:** 10.4103/indianjotol.INDIANJOTOL_84_16 **Abstract:** Stapedotomy, though a common surgical procedure for otosclerosis, if inadequately performed, can cause dreaded complications of vertigo and profound hearing loss. Labyrinthectomy with cochlear implantation can be considered in cases of intractable vertigo, as numerous reports have shown that the cochlea still remains responsive to electrical stimulation postlabyrinthectomy. This report presents a case of otosclerosis, with severe to profound deafness and intractable vertigo poststapedotomy surgery, which was treated with simultaneous labyrinthectomy and cochlear implantation. This patient had good control of vertigo postoperatively and the Dizziness Handicap Index score pre- and post-operative were 80 and 38, respectively, with significant improvement in speech perception. © 2017 Indian Journal of Otology Published by Wolters Kluwer - Medknow.				
573.	Ruban, A. and Somi Sankaran, P. A proposal based on a review of reforms for improving medical education in India Postgrad Med J; 2017, **Address:** Department of Biochemistry, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India.	**INT**	**JUL TO DEC**	**BIOCHEMISTRY**	**PMID:**29066665 **Impact Factor:** 1.874 **H-Index:** 80
574.	Rupa, V., Mani, S. E., Backianathan, S. and Rajshekhar, V. Management and Outcome in Patients with Advanced Juvenile Nasopharyngeal Angiofibroma Journal of Neurological Surgery, Part B: Skull Base; 2017, DOI 10.1055/s-0037-1608658 **Address:** Department of ENT, **Christian Medical College, Vellore,** Tamil Nadu, India Department of Radiodiagnosis, **Christian Medical College, Vellore,** Tamil Nadu, India Department of Radiation Therapy, **Christian Medical College, Vellore,** Tamil Nadu, India Department of Neurological Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India	**INT**	**JUL TO DEC**	**ENT, RADIODIAGNOSIS,RADIATIONTHERAPY, NEUROLOGICAL SCIENCES**	**NO PMID** **NO PMCID** **SCOPUS** **Impact Factor:** 1.092 **H-Index:** 32

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Objective To report the management outcome in a series of patients with advanced juvenile nasopharyngeal angiofibroma (JNA). Design Retrospective study. Setting Tertiary care teaching hospital. Participants Forty-five patients classified as Radkowski stage IIIA or IIIB who presented to us over the past 10 years. Main Outcome Measures Surgical approaches used and disease free outcomes in patients with advanced JNA. Results Surgical access for the extracranial component included open (41.9%) and expanded endonasal approaches (58.1%). Craniotomy (16.3%), endoscopy-assisted open approach (7%), or expanded endonasal approach (20.9%) was performed to excise the skull base or intracranial component. Follow up ranged from 4 to 96 months (mean, 20.3 months). Of 35 patients who underwent imaging at the first postoperative follow up, 25 (71.4%) had negative scans. Three symptomatic patients with residual disease underwent endoscopic excision and had negative scans thereafter. Of two others who had radiation therapy, one was disease free and the other lost to follow up. Five others had stable, residual disease. Three patients (8.6%) with recurrent disease underwent surgical excision, of whom two had minimal, stable residual disease. At the last follow-up, 27 (77.1%) patients had negative scans, and 7 (20%) had stable residual disease with one (2.9%) patient lost to follow-up. Conclusions Advanced JNA may be successfully treated in most cases with expanded endonasal/endoscopy assisted ± craniotomy approach after appropriate preoperative evaluation. At follow-up, only symptomatic patients or those with enlarging residue require treatment; periodic imaging surveillance is adequate for those with stable disease. Copyright © 2017, Georg Thieme Verlag KG. All rights reserved.				
575.	S Ebenezer Suman BabuTimothy Peace, et al Cerium nanoparticle effect on sensitivity of Fricke gel dosimeter: Initial investigation Journal of Physics Conference Series. May 2017	**INT**	**JAN-JUN**	**RADIOTHERAPY**	**No PMID** **Impact Factor:**0.45 **H Index:** 52 **Indexed In: WOS, Scopus**
576.	S. Daniel Sathiya Sundaram, JebaKarunya, Santosh Koshy Lingual Neurectomy in the Treatment of Trigeminal Neuralgia Scholars Journal of Dental Sciences, 2017 Aug 4(8) 352-354 **Address:** 1.Asst. Professor, Dental Department unit 2, Chrisitan Medical College	**NAT**	**JUL TO DEC**	**DENTAL UNIT II**	**Index Copernicus (IC Value 80.18)** **Imapct Factor 0.32 (Google**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	and Hospital, Vellore, India, 2.Asst. Professor, Radiotherapy Department unit 2, Chrisitan Medical College and Hospital, Vellore, India, 3.Professor, Dental Department unit 2, Chrisitan Medical College and Hospital, Vellore, India Abstract: Peripheral neurectomies for trigeminal neuralgia has been one of the modalities of treatment, which is cheaper, but with co morbidities. But the success in treating the third branch of the trigeminal nerve with peripheral neurectomy has been greatly reduced because of the failure to perform lingual neurectomy along with the other branches. We propose that lingual neurectomy should be done in cases where mental and inferior alveolar neurectomies have failed to relieve the pain and we also describe the surgical procedure for lingual neurectomy to ensure better success in the treatment of trigeminal neuralgia, through peripheral neurectomy.				**Scholar)**
577.	S. Manvizhi1, 2, B.S. Mathew3 *, Anil K. Kuruvilla4 , Kalpana Margaret Ernest5 , Saravana Kumar6 , V Balaji7 , Vigil James8 , Denise Fleming9 Adequacy of the current recommended dosage of Ciprofloxacin in preterm and term neonates with Sepsis Journal of Drug Delivery & Therapeutics. 2017; 7(3):102-105 **Address:** 1.P.G. Demonstrator, Department of Pharmacology, **Christian Medical College Hospital, Vellore**, Tamil Nadu, India. 2.Assistant Professor, Department of Pharmacology, Government Vellore Medical College Hospital, Adukkamparai, Tamil Nadu, India. 3. Professor, Department of Pharmacology and Clinical Pharmacology Unit, **Christian Medical College Hospital, Vellore**, Tamil Nadu, India. 4.Professor, Department of Neonatology, **Christian Medical College, Vellore,** Tamil Nadu-4, India 5. Professor, Department of Pharmacology and Clinical Pharmacology Unit, **Christian Medical College Hospital, Vellore**, Tamil Nadu, India. 6.Associate Research Officer, Clinical Pharmacology Unit, **Christian Medical College, Vellore,** Tamil Nadu, India -04. 7.Professor, Department of Microbiology, **Christian Medical College, Vellore,** Tamil Nadu, India – 04. 8.Department of Neonatology, **Christian Medical College, Vellore,** Tamil Nadu, India – 04. 9.Honorary Processor, Department of Pharmacology and Clinical Pharmacology Unit, **Christian Medical College Hospital, Vellore**, Tamil Nadu, India Objectives: To determine the percentage of neonates with sepsis, on treatment with standard recommended dose of intravenous ciprofloxacin, who had the serum ciprofloxacin Peak concentration: Minimum inhibitory concentration (Cmax:MIC),	**INT**	**JAN TO JUN**	**PHARMACOLOGY, NEONATOLOGY**	**IndexCopernicus** **Google Scholar H-Index: 19**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	within the acceptable range. Design: Observational study design Intervention: In the Neonatology ICU, ciprofloxacin was initiated at a dose of 10mg/kg, twice daily in 95 neonates diagnosed with sepsis. On day 3 of ciprofloxacin, blood specimens were collected to measure the trough and peak concentrations of ciprofloxacin and were measured by high performance liquid chromatography. The MIC was measured if the blood culture was positive. When the blood culture was negative, the reference values for the MIC from 'The Clinical and Laboratory Standard Institute Guidelines' were adopted. Main outcomes: Minimum inhibitory concentration and serum concentrations of ciprofloxacin Results: Blood culture was positive in 14 babies. The mean (±SD) trough concentrations of ciprofloxacin in term, preterm and very preterm neonates was 3.21(±1.99), 2.54 (±1.26) and 4.01(±1.80) µg/mL respectively. The mean (±SD) peak concentration of serum ciprofloxacin in term, preterm and very preterm neonates was, 12.55 (±4.945) 8.68(±3.61) and 12.07(±3.63) µg/mL, respectively. The percentage of neonates who achieved the acceptable Cmax /MIC ratio was predicted to be 74.07% if the strain was sensitive, 7.41% if intermediate and zero for resistant strains. Conclusion: The current recommended dose of intravenous ciprofloxacin in neonates in India may be adequate for treating sepsis due to susceptible organisms. For the treatment of sepsis caused by organisms with intermediate susceptibility, higher dosing regimens may be needed.				
578.	S. Pavamani, S. Thomas, et al EP-1075: Role of Diffusion Weighted Imaging in Laryngeal &Hypopharyngeal Cancers treated with Radiotherapy Radiotherapy and Oncology. May 2017Volume 123, Supplement 1, Pages S590–S591	**INT**	**JAN-JUN**	**RADIOTHERAPY**	**No PMID** **Impact Factor:** 5.18 **Indexed in: Scopus, Embase**
579.	Sabapathy, V., Herbert, F. J. and Kumar, S. Therapeutic Application of Placental Mesenchymal Stem Cells Reprogrammed Neurospheres in Spinal Cord Injury of SCID Methods Mol Biol; 2017, 1553 91-113 **Address:** Centre for Stem Cell Research, A Unit of inStem Bengaluru, **Christian Medical College,** Bagayam, Vellore, 632002, Tamil Nadu, India. Centre for Stem Cell Research, A Unit of inStem Bengaluru, **Christian Medical College,** Bagayam, Vellore, 632002, Tamil Nadu, India. skumar@cmcvellore.ac.in	**INT**	**JAN TO JUN**	**CENTRE FOR STEM CELL RESEARCH**	**PMID:**28229410 **Impact Factor:** 0.790 **H-Index:** 104

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Mesenchymal stromal cells (MSCs) and induced pluripotent stem cells (iPSCs) have stimulated much interest in the scientific community and hopes among the general public since their discovery in 1966 due to a variety of potential applications it has in the field of regenerative medicine. Copious amount of literature, as well as long-term animal and human clinical trials, indicates that MSCs can be successfully used for therapeutic purpose without any extreme adversities. MSCs have been isolated from adult and fetal tissues. Recently, MSCs from placenta have generated much inquisitiveness. In this article, we will demonstrate the step-by-step procedure for isolating human placental MSCs from term placenta, reprogramming of placental MSCs into iPSCs using plasmid vectors, evaluation of functional recovery in mice spinal cord injury models, and in vivo tracking of the transplanted cells.				
580.	Sabapathy, V., Sundaram, B. and Kumar, S. Therapeutic Application of Human Wharton Jelly Mesenchymal Stem Cells in Skin Injury of SCID Methods Mol Biol; 2017, 1553 115-132 **Address:** Centre for Stem Cell Research, A Unit of inStem Bengaluru, **Christian Medical College,** Bagayam, Vellore, 632002, Tamil Nadu, India. Centre for Stem Cell Research, A Unit of in Stem Bengaluru, **Christian Medical College,** Bagayam, Vellore, 632002, Tamil Nadu, India. skumar@cmcvellore.ac.in Mesenchymal stem cells (MSCs) are blossoming as a credible source for regenerative medical applications. The use of fetal MSCs is gaining momentum for therapeutic use. The ease of isolation, enhanced characteristics, and immunomodulation properties renders the utilization of fetal MSCs for numerous clinical applications. In this article, we will demonstrate a step-by-step protocol for isolation of Wharton's jelly MSCs (WJMSCs) from the human umbilical cord matrix, preparation of human platelet lysate, fabricating amniotic membrane scaffold and mice model to study skin regeneration using a combination of MSCs and decellularized amniotic membrane scaffold.	**INT**	**JAN TO JUN**	**CENTRE FOR STEM CELL RESEARCH,**	**PMID:**28229411 **Impact Factor:**0.790 **H-Index:** 104
581.	Sabharwal, S., Jeyaseelan, L., Panda, A., Gnanaraj, L., Kekre, N. S. and Devasia, A. A prospective randomised double-blind placebo-controlled trial to assess the effect	**INT**	**JUL TO DEC**	**UROLOGY, BIOSTATISTICS**	**PMID:**29234530 **PMCID:**5717457 **Impact Factor:**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	of diuretics on shockwave lithotripsy of calculi Arab J Urol; 2017, 15 (4): 289-293 **Address:** Department of Urology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India. Objective: To assess the effect of diuretics with shockwave lithotripsy (SWL) on the treatment of renal and upper ureteric calculi. Patients and methods: Adult patients with a solitary non-obstructive radio-opaque renal or upper ureteric calculus with normal renal function were included. They were prospectively randomised to receive either SWL with placebo or SWL with diuretics (40 mg parenteral furosemide) in a double-blind manner with a sample size of 48 patients in each arm. The primary outcomes were the SWL success and failure rates. The secondary outcomes were the number of shocks and sessions. Results: Complete fragmentation was achieved in 89.6% of the patients in the furosemide arm as compared to 81.3% in the placebo arm. Clearance was achieved in 77.1% of the patients in the furosemide arm as compared to 70.8% in the placebo arm. The number of shocks and the number of sessions were higher in the placebo arm. These differences were not statistically significant. Conclusion: The use of diuretics along with SWL treatment of renal and upper ureteric calculi does not show a statistically significant improvement in fragmentation or clearance.				0.480 **H-Index:** 8
582.	Sadanshiv, M., George, A. A., Mishra, A. K. and Kuriakose, C. K. Rifampicin-induced immune allergic reaction Trop Doct; 2017, 49475517724689 **Address:** 1 Resident, Department of Internal Medicine, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. 2 Assistant Professor, Department of Dermatology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. 3 Assistant Professor, Department of Internal Medicine, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. 4 Lecturer, Department of Internal Medicine, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India.	**INT**	**JUL TO DEC**	**INTERNAL MEDICINE, DERMATOLOGY**	**PMID:**28764592 **Impact Factor:** 0.450 **H-Index:** 28
583.	Sadashiv, M. S., Rupali, P., Manesh, A., Kannangai, R., Abraham, O. C., Pulimood, S. A., Karthik, R., Rajkumar, S. and Thomas, K.	**NAT**	**JUL TO DEC**	**INFECTIOUS DISEASE,**	**PMID:**29327520 **Impact Factor:**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Risk Factors of Clinical and Immunological Failure in South Indian Cohort on Generic Antiretroviral Therapy J Assoc Physicians India; 2017, 65 (12): 34-39 **Address:** Resident, Professor and Head, Department of Infectious Diseases. Assistant Professor, Professor. Clinical Pharmacist, **Christian Medical College, Vellore,** Tamil Nadu. Background: Since the time of NACO Antiretroviral (ART) roll-out, generic ART has been the mainstay of therapy. There are many studies documenting the efficacy of generic ART but with the passage of time, failure of therapy is on the rise. As institution of second line ART has significant financial implications both for a program and for an individual it is imperative that we determine factors which contribute towards treatment failure in a cohort of patients on generic antiretroviral therapy. Methodology: This was a nested matched case-control study assessing the predictors for treatment failure in our cohort who had been on Anti-retroviral therapy for at least a year. We identified 42 patients (Cases) with documented treatment failure out of our cohort of 823 patients and 42 sex, age and duration of therapy-matched controls. Using a structured proforma, we collected information from the out-patient and in-patient charts of the Infectious Diseases clinic Cohort in **CMC, Vellore**. A set of predetermined variables were studied as potential risk factors for treatment failure on ART. Results: Univariate analysis showed significant association with 1) Self-reported nonadherence<95% [OR 12.81 (95%CI 1.54-281.45)]. 2) Treatment interruptions in adherent cases (OR 9.56 (95% CI 1.11-213.35)]. 3) Past inappropriate therapies [OR 9.65 (95% CI 1.12-215.94)]. 4) Diarrhoea [OR 16.40 (95% CI 2.02-3.55.960]. 5) GI opportunistic infections (OR 11.06 (95% CI 1.31 -244.27)] and 6) Drug Toxicity [OR 3.69 (95% CI 1.15-12.35).In multiple logistic regression analysis, we found independent risk factors of treatment failure to be: Self-reported non-adherence (<95%) with OR 15.46(95%CI 1.55 - 154.08), drug toxicity - OR 4.13(95%CI 1.095 - 15.534) and history of diarrhoea - OR 23.446(95%CI 2.572 - 213.70). Conclusion: This study reveals that besides adherence to therapy, presence of diarrhoea and occurrence of drug toxicity are significant risk factors associated with failure of anti-retroviral therapy. There is a need for further prospective studies to assess their role in development of treatment failure on ART and thus help development of targeted interventions.			**PHARMACOLOGY, CLINICAL VIROLOGY**	0.370 **H-Index:** 48

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
584.	Sajan, J. E., John, J. A., Grace, P., Sabu, S. S. and Tharion, G. Wii-based interactive video games as a supplement to conventional therapy for rehabilitation of children with cerebral palsy: A pilot, randomized controlled trial Dev Neurorehabil; 2017, 20 (6): 361-367 **Address:** a Department of Physical Medicine and Rehabilitation ,**Christian Medical College** , Vellore , India. OBJECTIVE: To assess the effect of interactive video gaming (IVG) with Nintendo Wii (Wii) supplemented to conventional therapy in rehabilitation of children with cerebral palsy (CP). DESIGN: Randomized, controlled, assessor-blinded study. PARTICIPANTS: Children with CP; 10 children each in the control and intervention groups. INTERVENTION: IVG using Wii, given as a supplement to conventional therapy, for 45 min per day, 6 days a week for 3 weeks. The children in the control group received conventional therapy alone. OUTCOME MEASURES: Posture control and balance, upper limb function, visual-perceptual skills, and functional mobility. RESULTS: Significant improvement in upper limb functions was seen in the intervention group but not in the control group. Improvements in balance, visual perception, and functional mobility were not significantly different between control and intervention groups. CONCLUSIONS: Wii-based IVG may be offered as an effective supplement to conventional therapy in the rehabilitation of children with CP.	**INT**	**JUL TO DEC**	**DEPARTMENT OF PHYSICAL MEDICINE AND REHABILITATION**	**PMID:**27846366 **Impact Factor:** 1.183 **H-Index:** 43
585.	Sajith, K. G., Kapoor, N., Shetty, S., Goel, A., Zachariah, U., Eapen, C. E. and Paul, T. V. Bone Health and Impact of Tenofovir Treatment in Men with Hepatitis-B Related Chronic Liver Disease Journal of Clinical and Experimental Hepatology; 2017, https://doi.org/10.1016/j.jceh.2017.05.009 **Address:** Department of Hepatology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India Department of Hepatology, **Christian Medical College and Hospital,** Tamil Nadu, India Background: Chronic liver disease (CLD) has been shown to have an adverse	**NAT**	**JUL TO DEC**	**HEPATOLOGY , ENDOCRINOLOGY**	**NO PMID** **NO PMCID** **SCOPUS** **Impact Factor:** 0.380 **H-Index:** 15

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	impact on bone health. Hepatitis-B related CLD and its treatment with tenofovir may have additional effects on skeleton. Objective: To study the impact of HBV related CLD and its treatment with Tenofovir on bone health in Indian subjects. Methods: This cross sectional study included men (18-60 years) and comprised of three groups: Group-1 was treatment naïve HBV related CLD (n = 79), Group-2 those with HBV related CLD on tenofovir for at least 1 year (n = 136), Group-3 age, sex and body mass index (BMI) matched healthy controls (n = 58). Bone biochemistry and bone mineral density (BMD) at spine, femoral neck (FN) and forearm were studied. Independent t-test or ANOVA was used to compare the means of continuous variables and chi-square test for categorical variables. Multiple logistic regression was used to assess the factors causing low bone mass (LBM) at FN. Results: A significantly greater proportion (P <. 0.05) of patients (40%) with CLD (group 1 and group 2) had vitamin D deficiency (<20. ng/mL) in comparison with control group (22%). The mean serum C-Terminal telopeptide was significantly higher (P <. 0.05) and the mean BMD was significantly lower (P <. 0.05) in subjects with HBV related CLD than controls. The prevalence of LBM was higher in group 1 at the spine (31%) and forearm (18.4%) when compared to controls (8.1% and 7.8% respectively) (P <. 0.05). The proportion of patients with LBM at FN was highest in group 2 (12.3%) compared to those in group 1 (8%) and group 3 (4%) (P <. 0.05). Advanced age, low BMI, and high viral load (>10,000. IU/mL) emerged as significant risk factors for LBM at FN. Conclusion: The impact of hepatitis-B related CLD as well as its treatment on bone health is significant. Bone health need to be periodically evaluated in these subjects especially in older men who are lean and have a higher viral load. © 2017 INASL.				
586.	Saluja, T., Dhingra, M. S., Sharma, S. D., Gupta, M., Kundu, R., Kar, S., Dutta, A. K., Silveira, M. D., Singh, J. V., Kamath, V. G., Chaudhary, A., Rao, V., Ravi, M. D., Murthy, K., Arumugam, R., Moureau, A., Prasad, R. and Patnaik, B. N. Association of rotavirus strains and severity of gastroenteritis in Indian children Hum Vaccin Immunother; 2017, 13 (3): 711-716 **Address:** a Shantha Biotechnics Pvt. Ltd., Hyderabad, India. b Sanofi Pasteur, Swiftwater, PA, USA. c SMS Medical College, Jaipur, India. d Postgraduate Institute of Medical Education and Research, Chandigarh, India. e Institute of Child Health, Kolkata, India. f Kalinga Institute of Medical Sciences, Bhubaneswar, India. g	**INT**	**JAN TO JUN**	**CLINICAL VIROLOGY**	**PMID:**27686522 **Impact Factor:** 2.157 **H-Index:** 30

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	School of Medical Sciences and Research, Sharda University, Noida, India. h Govt. Medical College, Goa, India. i CSM Medical University, Lucknow, India. j Kasturba Medical College, Manipal, India. k Dayanand Medical College, Ludhiana, India. l Gandhi Medical College, Hyderabad, India. m JSS Medical College and Hospital, Mysore, India. n Kempegowda Institute of Medical Sciences, Bangalore, India. o**Christian Medical College, Vellore,** India. p Sanofi Pasteur, Lyon, France. Rotavirus is the leading cause of severe and dehydrating diarrhea in children aged under 5 years. We undertook this hospital-based surveillance study to examine the possible relationship between the severity of diarrhea and the various G-group rotaviruses circulating in India. Stool samples (n = 2,051) were systematically collected from 4,711 children aged <5 years admitted with severe acute gastroenteritis to 12 medical school centers from April 2011 to July 2012. Rotavirus testing was undertaken using a commercially available enzyme immunoassay kit for the rotavirus VP6 antigen (Premier Rotaclone Qualitative ELISA). Rotavirus positive samples were genotyped for VP7 and VP4 antigens by reverse-transcription polymerase chain reaction at a central laboratory. Of the stool samples tested for rotavirus antigen, 541 (26.4%) were positive for VP6 antigen. Single serotype infections from 377 stool samples were compared in terms of gastroenteritis severity. Among those with G1 rotavirus infection, very severe diarrhea (Vesikari score >/= 16) was reported in 59 (33.9%) children, severe diarrhea (Vesikari score 11-15) in 104 (59.8%), moderate (Vesikari score 6-10) and mild diarrhea (Vesikari score 0-5) in 11 (6.3%). Among those with G2 infection, very severe diarrhea was reported in 26 (27.4%) children, severe diarrhea in 46 (48.4%), and moderate and mild diarrhea in 23 (24.2 %). Among those with G9 infection, very severe diarrhea was reported in 47 (54.5%) children, severe diarrhea in 29 (33.6%), and moderate and mild diarrhea in 10 (11.9%). Among those with G12 infection, very severe diarrhea was reported in 9 (40.9%) children and severe diarrhea in 13 (59.1%). The results of this study indicate some association between rotavirus serotypes and severity of gastroenteritis.				
587.	Saluja, T., Palkar, S., Misra, P., Gupta, M., Venugopal, P., Sood, A. K., Dhati, R. M., Shetty, A., Dhaded, S. M., Agarkhedkar, S., Choudhury, A., Kumar, R., Balasubramanian, S., Babji, S., Adhikary, L., Dupuy, M., Chadha, S. M., Desai, F., Kukian, D., Patnaik, B. N. and Dhingra, M. S. Live attenuated tetravalent (G1-G4) bovine-human reassortant rotavirus vaccine (BRV-TV): Randomized, controlled phase III study in Indian infants	**INT**	**JAN TO JUN**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28536027 **Impact Factor:** 3.235 **H-Index:** 151

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Vaccine; 2017, 35 (28): 3575-3581 **Address:** Shantha Biotechnics Pvt. Ltd., Hyderabad, India. Electronic **Address:** Tarun.Saluja@sanofi.com Bharati Vidyapeeth Deemed University Medical College, Pune, India. All India Institute of Medical Sciences, New Delhi, India. Post Graduate Institute of Medical Education & Research, Chandigarh, India. King George Hospital, Visakhapatnam, India. Indira Gandhi Medical College, Shimla, India. JSS University, Mysore, India. Dr. TMA Pai Rotary Hospital, Karkala, India. J N Medical College, Belgaum, India. Padmashree Dr. D. Y. Patil Medical College & Research Center, Pune, India. KPC Medical College & Hospital, Kolkata, India. Pt. Bhagwat Dayal Sharma Post Graduate Institute of Medical Sciences, Rohtak, India. Kanchi Kamakoti Child Trust Hospital & The Child Trust Medical Research Foundation, Chennai, India. **Christian Medical College, Vellore,** Tamil Nadu, India. Shantha Biotechnics Pvt. Ltd., Hyderabad, India. Sanofi Pasteur, Marcy-l'Etoile, France. Sanofi Pasteur, Swiftwater, USA. **BACKGROUND:** Rotavirus remains the leading cause of diarrhoea among children <5years. We assessed immunogenic non-inferiority of a tetravalent bovine-human reassortant rotavirus vaccine (BRV-TV) over the licensed human-bovine pentavalent rotavirus vaccine RV5. **METHODS:** Phase III single-blind study (parents blinded) in healthy infants randomized (1:1) to receive three doses of BRV-TV or RV5 at 6-8, 10-12, and 14-16weeks of age. All concomitantly received a licensed diphtheria, tetanus, pertussis, hepatitis B, Haemophilus influenzae type b conjugate vaccine (DTwP-HepB-Hib) and oral polio vaccine (OPV). Immunogenic non-inferiority was evaluated in terms of the inter-group difference in anti-rotavirus serum IgA seroresponse (primary endpoint), and seroprotection/seroresponse rates to DTwP-HepB-Hib and OPV vaccines. Seroresponse was defined as a >/=4-fold increase in titers from baseline to D28 post-dose 3. Non-inferiority was declared if the difference between groups (based on the lower limit of the 95% confidence interval [CI]) was above -10%. Each subject was evaluated for solicited adverse events 7days and unsolicited & serious adverse events 28days following each dose of vaccination. **RESULTS:** Of 1195 infants screened, 1182 were randomized (590 to BRV-TV; 592 to RV5). Non-inferiority for rotavirus serum IgA seroresponse was not established: BRV-TV, 47.1% (95%CI: 42.8; 51.5) versus RV5, 61.2% (95%CI: 56.8; 65.5); difference between groups, -14.08% (95%CI: -20.4; -7.98). Serum IgA geometric mean				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	concentrations at D28 post-dose 3 were 28.4 and 50.1U/ml in BRV-TV and RV5 groups, respectively. For all DTwP-HepB-Hib and OPV antigens, seroprotection/seroresponse was elicited in both groups and the -10% non-inferiority criterion between groups was met. There were 16 serious adverse events, 10 in BRV-TV group and 6 in RV5 group; none were classified as vaccine related. Both groups had similar vaccine safety profiles. **CONCLUSION:** BRV-TV was immunogenic but did not meet immunogenic non-inferiority criteria to RV5 when administered concomitantly with routine pediatric antigens in infants.				
588.	Samanta, S., Balukrishna, S., Rafic, K. M., Timothy Peace, B. S., Singh, I. R. R. and Pavamani, S. P. Adding another dimension to plan evaluation: visualising the dose–volume histogram band in head and neck radiotherapy and exploring its utility Journal of Radiotherapy in Practice, 16(4), 403-408. doi:10.1017/S1460396917000206 **Address:** Department of Radiation Oncology, Dr Ida B Scudder Cancer Center, **Christian Medical College, Vellore,** Tamil Nadu, India Background: To introduce a method to generate a 'dose–volume histogram (DVH) band' for plan evaluation of photon therapy and explore its various potentials. Materials and methods: Intensity-modulated radiotherapy (IMRT) plans for head and neck cancer patients were analysed, retrospectively, for setup errors noted during treatment. From the maximum observed random errors, absolute displacement was calculated using Euclidian formula. The original plan with same beam parameters and leaf sequence were used to generate six plans with shifts applied in three axes in six directions. The DVH curves from these six plans were superimposed to form the DVH band. Plans were reviewed with set tolerance criteria. Results: Method to generate and visualise DVH band was developed. DVH bands were created for 20 patients with head and neck cancer who underwent treatment with IMRT. It was found that seven out these 20 plans were rejected as they crossed the set tolerance criteria using DVH band as an evaluation tool. Conclusions: DVH band in photon therapy can help the clinician visualise the impact of setup errors at planning and may help select the plan with lesser influence of setup errors over another. © Cambridge University Press 2017	**INT**	**JUL TO DEC**	**RADIOTHERAPY**	**NO PMID** **NO PMCID** **SCOPUS** **Impact Factor:**0.190 **H-Index:** 10
589.	Samarasam, Inian	**INT**	**JAN TO**	**SURGERY**	**Not Indexed in**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Esophageal cancer in India: Current status and future perspectives International Journal of Advanced Medical and Health Research; 2017, 4 (1): 5-10 **Address:**Department of Surgery, Upper GI Surgery Unit, **Christian Medical College Hospital, Vellore**, Tamil Nadu, India Esophageal cancer is the fourth common cause of cancer-related deaths in India. It is prevalent among both men and women. Squamous cell carcinoma (SCC) accounts for up to 80% of these cancers, although adenocarcinoma is on the increase due to changing lifestyles. The etiological factors for SCCs show a regional variation in different parts of India, but tobacco consumption in various forms, alcohol, hot beverages, and poor nutrition remain the predominant predisposing factors. Generally, these cancers present late and therefore have a poor prognosis. The current status of esophageal cancer in India in relation to the demographics, diagnosis, staging, multimodality treatment, surgical therapy, and the future perspectives are discussed in this review article.		**JUN**	**UNIT III**	**PubMed**
590.	Samuel R(1), Jacob KS(2). Occupational therapy in India: focus on functional recovery and need for empowerment. Indian J Psychiatry. 2017 Apr-Jun;59(2):242-246. doi: 10.4103/psychiatry.IndianJPsychiatry_111_17. **Address:** (1)Occupational Therapy Education and Services, **Christian Medical College, Vellore,** Tamil Nadu, India. (2)Department of Psychiatry, **Christian Medical College, Vellore,** Tamil Nadu, India. While there have been significant advances in treatments for mental disorders over the past century, cure for many mental disorders remains elusive. The complex problems of mental illness require a multi-sectoral, multi-disciplinary and multi-dimensional approach to care. The need for focus on biopsychosocial model rather than on biomedical practise, client-centred rather than physician-oriented care, personal rather than clinical recovery, are often preached but rarely practiced. The lack of emphasis on functioning and the limited workforce and evidence base	**NAT**	**JAN TO JUN**	**OCCUPATIONAL THERAPY EDUCATION AND SERVICES, PSYCHIATRY**	**PMID:** 28827877 **PMCID:** PMC 5547871 **Impact Factor:** 0.810 **H-Index:** 20

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	complicate issues related to the care of people with chronic mental illness in India. The role of occupational therapy in bridging the gap between symptomatic improvement and functional recovery is discussed. DOI: 10.4103/psychiatry.IndianJPsychiatry_111_17 Conflict of interest statement: There are no conflicts of interest.				
591.	Sandhya P, Kurien BT, Danda D, Scofield RH. Update on Pathogenesis of Sjogren's Syndrome CurrRheumatol Rev. 2017;13(1):5-22. doi: 10.2174/1573397112666160714164149.	**INT**	**JAN-JUN**	**IDRTC, RHEUMATOLOGY**	**PMID:**27412602 **PMCID:**PMC5280579 **Impact Factor:** 0.32 H Index: 12 Indexed in: SCOPUS
592.	Sandhya P, Danda D Primary Sjögren's syndrome in Asia: Yin and Yang? Int J Rheum Dis. 2017 Oct;20(10):1309-1312. doi: 10.1111/1756-185X.13201. **Address:** Department of Clinical Immunology and Rheumatology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India.	**INT**	**JUL-DEC**	**IDRTC/ CLINICAL IMMUNOLOGY AND RHEUMATOLOGY**	**PMID:**29027763 **Impact Factor:**2.624 H Index: 27 Indexed in: Scopus, Embase
593.	Sandhya, P., Christudoss, P., Kabeerdoss, J., Mandal, S. K., Aithala, R., Mahasampath, G., Job, V. and Danda, D. Diagnostic accuracy of salivary and serum-free light chain assays in primary Sjogren's syndrome: a pilot study Int J Rheum Dis; 2017, 20 (6): 760-766 **Address:** Department of Clinical Immunology & Rheumatology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Clinical Biochemistry, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Biostatistics, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. OBJECTIVE: To estimate levels of salivary and serum free light chains (FLCs) and explore its utility as a biomarker in primary Sjogren's syndrome (pSS). METHODS: Patients with pSS classified by American European Consensus group 2002 or	**INT**	**JUL TO DEC**	**CLINICAL IMMUNOLOGY AND RHEUMATOLOGY, CLINICAL BIOCHEMISTRY, BIOSTATISTICS**	**PMID:**28036132 **Impact Factor:**2.624 **H-Index:** 27

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	American College of Rheumatology 2012 criteria between January 2015 and August 2015 were included. Healthy staff and non-first degree relatives of patients constituted controls. Serum and salivary FLCs were measured by immunoturbidometry using FREELITE() Human Kappa(kappa) and Lambda(lambda) Free Kit (Binding site, Birmingham, UK), on a Roche Modular P800. FLCs were compared between cases and controls using the Mann-Whitney U-test. The receiver operator characteristic curve was constructed to analyze the discriminating ability of salivary and serum kappa and lambda FLCs. RESULTS: Salivary and serum FLCs were assayed in 15 patients and 13 patients, respectively, and in 15 controls. Median age of cases and controls was 34 years. Salivary kappa and lambda FLCs were higher in pSS as compared to controls (P < 0.05 and P < 0.001, respectively). Serum kappa and lambda FLCs were also higher in pSS (both P < 0.05). Salivary lambda levels were higher in pSS with ocular signs; serum kappa and lambda levels were higher in those with ocular symptoms. A cut off of >/= 1.1 mg/L for salivary lambda FLC had a sensitivity and specificity of 73.3% and 93.3%, respectively, for the diagnosis of pSS. Serum kappa FLC >/= 30 mg/L had a sensitivity and specificity of 92.3% and 73.3%, respectively. CONCLUSION: Serum and salivary FLCs and in particular the latter, are potential biomarkers in pSS. Larger studies are required for validating the findings.				
594.	Sandhya, P., Mahasampath, G., Mashru, P., Bondu, J. D., Job, V. and Danda, D. Vitamin D Levels and Associations in Indian Patients with Primary Sjogren's Syndrome J Clin Diagn Res; 2017, 11 (9): OC33-OC36 **Address:** Associate Professor, Department of Rheumatology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Senior Demonstrator, Department of Biostatistics, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Senior Registrar, Department of Rheumatology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Lecturer, Department of Clinical Biochemistry, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Professor and Head, Department of Clinical Biochemistry, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Professor and Head of Department, Department of Rheumatology, **Christian**	**NAT**	**JUL TO DEC**	**CLINICAL IMMUNOLOGY AND RHEUMATOLOGY,BIOSTATISTICS, CLINICAL BIOCHEMISTRY**	**PMID:**29207757 **PMCID:**5713779 **Impact Factor:** 0.650 **H-Index:** 18

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Medical College and Hospital, Vellore, Tamil Nadu, India. Introduction: Vitamin D is a steroid hormone belonging to the class of secosteroids with myriad immune functions and has been implicated in aetiopathogenesis of various autoimmune diseases. Although, there have been various studies showing the association of vitamin D in rheumatoid arthritis and lupus in different populations, there have been limited studies on vitamin D and primary Sjogren's Syndrome (pSS). There are no studies on association of vitamin D and pSS from any tropical country including Indian subcontinent. Aim: The purpose of the study was to look for any association between 25-hydroxyvitamin D (25(OH)D) levels and disease manifestations in Indian patients with pSS. Materials and Methods: This is a retrospective cross-sectional study done at a tertiary teaching hospital in southern India in 235 patients with pSS. Patients satisfying the American European Consensus Group (AECG) or American College of Rheumatology (ACR) 2012 for pSS between 2008 and 2015 were included if baseline 25(OH)D levels using electrochemiluminescence were available in hospital's laboratory record, 25(OH)D <20 ng/ml,20-30 ng/ml and >30 ng/ml was defined as deficiency, insufficiency and normal, respectively. Clinical laboratory data and disease activity scoring by EULAR Sjogren's syndrome disease activity index (ESSDAI) were retrieved retrospectively. Latitude corresponding to residence of each patient and the season of performing the assay were recorded. Chi-square statistics was done to find associations between categorized 25(OH)D and outcomes and was reported as odds ratio(95% confidence interval). Results: Mean 25(OH)D for 235 patients with pSS was 19.98(12.55)ng/ml. A vitamin D deficiency, insufficiency and sufficiency was seen in 141(60%), 60(25.5%) and 34.0(14.5%), respectively. No association was noted between latitude or season of performing assay and the levels. pSS with 25(OH)D </=30ng/ml had more than two fold risk of higher grading on lip biopsy as well as Rheumatoid Factor (RF) positivity. However, low 25(OH)D seemed to be associated with lower ESSDAI and less pulmonary involvement. Conclusion: Prevalence of 25(OH)D deficiency in Indian patients with pSS was comparable to that of general Indian population. Low 25(OH)D level </=30ng/ml was associated with higher odds for RF positivity and positive grading on lip biopsy. Surprisingly, low 25(OH)D was associated with lower ESSDAI score.				
595.	Sandhya, P., Vellarikkal, S. K., Nair, A., Ravi, R., Mathew, J., Jayarajan, R., Kumar, A., Verma, A., Sivadas, A., Danda, D., Sivasubbu, S. and Scaria, V.	**INT**	**JAN TO JUN**	**CLINICAL IMMUNOLOGY AND**	**PMID:**28211254 **Impact Factor:** 2.624

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Egyptian tale from India: application of whole-exome sequencing in diagnosis of atypical familial Mediterranean fever Int J Rheum Dis; 2017, **Address:** Department of Rheumatology, **Christian Medical College and Hospital, Vellore**, India. Genomics and Molecular Medicine, CSIR Institute of Genomics and Integrative Biology (CSIR-IGIB), Delhi, India. Academy of Scientific and Innovative Research (AcSIR), Delhi, India. GN Ramachandran Knowledge Center for Genome Informatics, CSIR Institute of Genomics and Integrative Biology (CSIR-IGIB), Delhi, India. Clinical diagnosis of autoinflammatory diseases requires a high degree of clinical suspicion and clinching molecular evidence to substantiate the diagnosis. This is more so in populations with low prevalence of these disorders. In this report, we describe the case of a young man from India with recurrent fever and persistent arthritis. The patient's forefathers were of Egyptian ancestry who practiced consanguinity. Molecular genetic analysis using whole-exome sequencing suggested the presence of variants c.443A>T:p.E148V and c.442G>C:p.E148Q in the MEFV gene, earlier independently shown to be associated with familial Mediterranean fever (FMF) in a compound heterozygous state. The variants were further confirmed by capillary sequencing. This report also highlights the application of whole exome sequencing to delineate the allelic differences in the variants apart from serving as a quick genetic screening approach for autoinflammatory diseases. To the best of our knowledge, this is the first report of a compound heterozygosity for the two well-characterized variants associated with atypical FMF in a patient.			**RHEUMATOLOGY**	**H-Index:** 27
596.	Sangal, L., Joshi, S., Anandan, S., Balaji, V., Johnson, J., Satapathy, A., Haldar, P., Rayru, R., Ramamurthy, S., Raghavan, A. and Bhatnagar, P. Resurgence of Diphtheria in North Kerala, India, 2016: Laboratory Supported Case-Based Surveillance Outcomes Front Public Health; 2017, 5 218 **Address:** WHO India, World Health Organization, New Delhi, India. Department of Clinical Microbiology, **Christian Medical College, Vellore,** India. State Public Health Laboratory, Thiruvananthapuram, India. WHO India, World Health Organization, Bangalore, India.	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY**	**PMID:**28913330 **PMCID:**5582196 **Impact Factor:** 2.110 **H-Index:** NA

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Ministry of Health and Family Welfare, Government of India, New Delhi, India. Ministry of Health, Government of Kerala, Thiruvananthapuram, India. WHO India, World Health Organization, Kozhikode, India. WHO India, World Health Organization, Thiruvananthapuram, India. INTRODUCTION: As part of national program, laboratory supported vaccine preventable diseases surveillance was initiated in Kerala in 2015. Mechanisms have been strengthened for case investigation, reporting, and data management. Specimens collected and sent to state and reference laboratories for confirmation and molecular surveillance. The major objective of this study is to understand the epidemiological information generated through surveillance system and its utilization for action. METHODS: Surveillance data captured from reporting register, case investigation forms, and laboratory reports was analyzed. Cases were allotted unique ID and no personal identifying information was used for analysis. Throat swabs were collected from investigated cases as part of surveillance system. All Corynebacterium diphtheriae isolates were confirmed with standard biochemical tests, ELEK's test, and real-time PCR. Isolates were characterized using whole genome-based multi locus sequence typing method. Case investigation forms and laboratory results were recorded electronically. Public health response by government was also reviewed. RESULTS: A total of 533 cases were identified in 11 districts of Kerala in 2016, of which 92% occurred in 3 districts of north Kerala; Malappuram, Kozhikode, and Kannur. Almost 79% cases occurred in >10 years age group. In <18 years age group, 62% were male while in >/=18 years, 69% were females. In <10 years age group, 31% children had received three doses of diphtheria vaccine, whereas in >/=10 years, 3% cases had received all doses. Fifteen toxigenic C. diphtheriae isolates represented 6 novel sequence types (STs) (ST-405, ST-408, ST-466, ST-468, ST-469, and ST-470). Other STs observed are ST-50, ST-295, and ST-377. CONCLUSION: Diphtheria being an emerging pathogen, establishing quality surveillance for providing real-time information on disease occurrence and mortality is imperative. The epidemiological data thus generated was used for targeted interventions and to formulate vaccine policies. The data on molecular surveillance have given an insight on strain variation and transmission patterns.				
597.	Santhakumar, Sreenithi, Athiyarath, Rekha, Cherian, Anne George, Abraham, Vinod Joseph and Edison, Eunice Sindhuvi Comparison of Maternal and Fetal Iron Regulators in Iron Deficiency Anemia of Pregnancy	**INT**	**JUL TO DEC**	**HAEMATOLOGY, CLINICAL GENETICS**	**NO PMID** **WOS:**000405417100221 **Impact Factor:**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	American Journal of Hematology; 2017, 92 (8): E386-E386				5.275 **H-Index:** 83
598.	Santhakumar, Sreenithi, Athiyarath, Rekha, Cherian, Anne George, Abraham, Vinod Joseph and Edison, Eunice Sindhuvi Placental Expression Of Iron Homeostasis Genes In Iron Deficiency Anemia Of Pregnancy American Journal of Hematology; 2017, 92 (8): E288-E288	**INT**	**JUL TO DEC**	**HEMATOLOGY**	**NO PMID** **WOS:**000405417100124 **Impact Factor:** 5.275 **H-Index:** 83
599.	Santhanam, I., Yoganathan, S., Sivakumar, V. A., Ramakrishnamurugan, R., Sathish, S. and Thandavarayan, M. Predictors of Outcome in Children with Status Epilepticus during Resuscitation in Pediatric Emergency Department: A Retrospective Observational Study Ann Indian Acad Neurol; 2017, 20 (2): 142-148 **Address:** Department of Paediatric Emergency, Institute of Child Health and Hospital of Children, Madras Medical College, Chennai, Tamil Nadu, India. Department of Neurological Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Pediatrics, Dr. Kamakshi Memorial Hospital, Chennai, Tamil Nadu, India. Department of Pediatrics, Dr. Mehta's Hospitals Pvt. Ltd., Chennai, Tamil Nadu, India. **OBJECTIVES:** To study the clinical profile and predictors of outcome in children with status epilepticus (SE) during resuscitation in pediatric emergency department. **MATERIALS AND METHODS:** This retrospective study was carried out in a tertiary care teaching hospital. Admission and resuscitation data of children, aged between 1 month and 12 years, treated for SE, between September 2013 and August 2014, were extracted using a standard data collection form. Our SE management protocol had employed a modified pediatric assessment triangle to recognize and treat acute respiratory failure, cardiovascular dysfunction (CD), and subtle SE until all parameters resolved. Continuous positive airway pressure, fluid boluses based on shock etiology, inotropes, and cardiac safe anticonvulsants were the other modifications. Risk factors predicting mortality during resuscitation were analyzed using univariate and penalized logistic regression. **RESULTS:** Among 610 who were enrolled, 582 (95.4%) survived and 28 (4.6%) succumbed. Grunt odds ratio (OR): 3.747 (95% confidence interval [CI]: 1.035-13.560), retractions OR:	**NAT**	**JAN TO JUN**	**NEUROLOGICAL SCIENCES**	**PMID:**28615900 **Impact Factor:** 0.950 **H-Index:** 17

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	2.429 (95% CI: 1.036-5.698), rales OR: 10.145 (95% CI: 4.027-25.560), prolonged capillary refill time OR: 3.352 (95% CI: 1.339-8.388), and shock requiring >60 mL/kg fluids OR: 2.439 (95% CI 1.040-5.721) were associated with 2-3 times rise in mortality. Inappropriate prehospital treatment and CD were the significant predictors of mortality OR: 7.82 (95% CI 2.10-29.06) and 738.71 (95% CI: 97.11-999), respectively. Resolution of CD was associated with improved survival OR: 0.02 (95% CI: 0.003-0.17). **CONCLUSION:** Appropriate prehospital management and treatment protocol targeting resolution of CD during resuscitation could reduce mortality in children with SE.				
600.	Santhanam, S., Arun, S., Rebekah, G., Ponmudi, N. J., Chandran, J., Jose, R. and Jana, A. K. Perinatal Risk Factors for Neonatal Early-onset Group B Streptococcal Sepsis after Initiation of Risk-based Maternal Intrapartum Antibiotic Prophylaxis-A Case Control Study J Trop Pediatr; 2017, **Address:** Neonatology Department, **Christian Medical College, Vellore** 632004, India. Department of Biostatistics, **Christian Medical College, Vellore** 632004, India. Department of Obstetrics, **Christian Medical College, Vellore** 632004, India. Objectives: To identify the perinatal risk factors for early-onset Group B Streptococcus (EOGBS) sepsis in neonates after inception of a risk-based maternal intrapartum antibiotic prophylaxis strategy in 2004. Design: Case control study. Methods: All newborn with early onset GBS sepsis (born between 2004 and 2013) were deemed to be "cases" and controls were selected in a 1:4 ratio. Results: More than three per vaginal (PV) examinations [odds ratio (OR) 8.57, 95% confidence interval (CI) 3.10-23.6] was a significant risk factors. Peripartum fever (OR 3.54, 95% CI 1.3-9.67), urinary tract infection (OR 2.88, 95% CI 1.08-7.63), meconium-stained amniotic fluid (MSAF) (OR 2.52, 95% CI 1.18-5.37) and caesarean section (OR 1.99, 95% CI 1.16-3.43) were also found to be associated with EOGBS sepsis. Conclusion: Multiple vaginal examinations are the strongest risk factors for peripartum Group B Streptococcal (GBS) sepsis. The association of MSAF and caesarean section indicates that foetal distress is an early symptom of perinatal GBS infection.	**INT**	**JUL TO DEC**	**NEONATOLOGY, BIOSTATISTICS, OBSTETRICS**	**PMID:**29036682 **Impact Factor:** 1.093 **H-Index:** 44
601.	Santhanam, S., Jose, R., Sahni, R. D., Thomas, N. and Beck, M. M. Prevalence of group B Streptococcal colonization among pregnant women and	**INT**	**JUL TO DEC**	**NEONTATOLOGY,**	**PMID:**29278230 **Impact Factor:**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	neonates in a tertiary hospital in India J Turk Ger Gynecol Assoc; 2017, 18 (4): 181-184 **Address:** Department of Neonatology, **Christian Medical College, Vellore,** India. Department of Obstetrics and Gynecology, **Christian Medical College, Vellore,** India. Department of Clinical Microbiology, **Christian Medical College, Vellore,** India. OBJECTIVE: To estimate the prevalence of group B Streptococcus (GBS) carriage among pregnant women attending the antenatal clinic, and the colonization rates among newborn born to colonized mothers. MATERIAL AND METHODS: Women attending the antenatal clinic between 35-37 weeks were screened using rectal and lower vaginal swab. Swabs were initially plated on sheep blood agar and LIM broth. The LIM broth was subcultured after 24 hours onto blood agar and CHROMagar StrepB plates with all plates checked for growth at 24 and 48 hours. All babies born to mothers in the study had surface swabs taken to estimate the vertical transmission rate. RESULTS: Between September 2012 and March 2013, 305 consecutive mothers were screened. Of these, eight mothers were GBS positive in 5% blood agar (2.6%) and 23 mothers showed GBS positivity in enriched media (7.6%). Sixteen of 238 babies (6.7%) were colonized. CONCLUSION: Though lower than rates from most countries, 7.6% of mothers attending an antenatal clinic in south India were colonized with GBS. Use of enrichment media markedly increased the detection rate. Approximately two-thirds of newborn born to colonized mothers were also colonized. There were no instances of invasive GBS disease, indirectly proving the efficacy of intrapartum prophylaxis in preventing neonatal GBS disease.			**OBSTETRICS AND GYNECOLOGY, CLINICAL MICROBIOLOGY**	0.680 **H-Index:** 8
602.	Sara Chandy1, Lokeshwaran Kirubanandhan2, Priya Hemavathy3, Anees Mohammad Khadeeja3, Siby Jacob Kurian3, Krishnan Venkataraman2, Kristine Mørch4, Dilip Mathai5,Anand Manoharan1 Serovar prevalence of Leptospirain semirural India and the development of an IgM-based indirect ELISA J Infect Dev Ctries2017; 11(3):234-241.doi:10.3855/jidc.8067 **AUTHOR INFORMATION:** 1 Pushpagiri Research Center, Pushpagiri Institute of Medical Sciences, Tiruvalla, India	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY**	**PMID:**28368857 **WOS:**000399018600004 **Impact Factor:** 1.353 **H-Index:** 35

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	2 Centre for BioSeparation Technology, (CBST) Vellore Institute of Technology, Vellore, India 3 **Christian Medical College, Vellore,** India 4 National Center for Tropical Infectious Diseases, Haukeland University Hospital, Bergen, Norway 5 Apollo Institute of Medical Sciences and Research (AIMSR), Hyderabad, India Introduction: Leptospirosis is a major public health problem in India. However, it has been underreported and under-diagnosed due to a lack of awareness of the disease, a functional surveillance system, and appropriate laboratory diagnostic facilities.Methodology: This multicenter study aimed to understand the Leptospiraserovars causing leptospirosis in seven secondary-level hospitals in six states in India. Since early and accurate diagnosis of leptospirosis is one of the challenges faced by clinicians in India due to the poor specificity and sensitivity of commercially available diagnostic systems, an in-house indirect enzyme-linked immunosorbent assay (ELISA) was developed. Genomic DNA from L. interrogansserovar Canicola was used for polymerase chain reaction amplification, cloning, and expression of the lipL32gene in E. colito amplify, clone, and express the lipL32gene.Results: Australis was the common serovar seen at all the study centers. Serovar Icterohaemorrhagiae was seen in samples from Tamil Nadu and Assam. In-house ELISA was standardized using the purified recombinant LipL32 polypeptide and was used to evaluate serum. Subsequently, acute serum samples from leptospirosis patients (n = 60) were screened. Compared to the gold standard, the microscopic agglutination test, sensitivity and specificity of the in-house ELISA was 95% and 90%, respectively.Conclusions: Understanding Leptospiraserovars circulating in leptospirosis-endemic areas will help to formulate better vaccines. LipL32-based ELISA may serve as a valuable tool for early diagnosis of leptospirosis. Key words:Leptospiraserovars; recombinant LipL32; India				
603.	Sarkar, R., Rose, A., Mohan, V. R., Ajjampur, S. S. R., Veluswamy, V., Srinivasan, R., Muliyil, J., Rajshekhar, V., George, K., Balraj, V., Grassly, N. C., Anderson, R. M., Brooker, S. J. and Kang, G. Study design and baseline results of an open-label cluster randomized community –intervention trial to assess the effectiveness of a modified mass deworming program in reducing hookworm infection in a tribal population in a tribal population in southern India	**INT**	**JAN-JUN**	**NEUROSURGERY UNIT II**	**PMID:**28424794 **PMCID:**PMC5389336 **Impact Factor:** 1.44 Indexed in: SCOPUS

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	ContempClin Trials Commun. 2017 Mar;5:49-55. doi: 10.1016/j.conctc.2016.12.002.				
604.	Sarkar, S. and Rajshekhar, V. Long Term Sustainability of Functional Improvement Following Central Corpectomy for Cervical Spondylotic Myelopathy and Ossification of Posterior Longitudinal Ligament Spine (Phila Pa 1976); 2017, **Address:** Department of Neurological Sciences, **Christian Medical College, Vellore,** India. STUDY DESIGN: Retrospective study. OBJECTIVE: To examine predictors of long-term outcome and sustainability of initial functional improvement in patients undergoing corpectomy for cervical spondylotic myelopathy (CSM) or ossification of the posterior longitudinal ligament (OPLL). SUMMARY OF BACKGROUND DATA: There are limited data on the predictors of outcome and sustainability of initial functional improvement on long-term follow-up following cervical corpectomy. METHODS: We studied the functional outcome at > 1 year follow-up after central corpectomy in 352 patients with CSM or OPLL. Functional status was evaluated with the Nurick grading system. Analysis was directed at identifying factors associated with both improvement in functional status and the achievement of a "cure" (improvement to a follow-up Nurick grade of 0 or 1). A survival analysis was performed to identify factors associated with sustained functional improvement in patients with serial follow-up evaluations. RESULTS: Nurick grade improved from 3.2 +/- 0.1 to 1.9 +/- 0.1 over a mean follow-up period of 57.1 months (range 12-228 months). On multivariate analysis, age >/=50 years (p = 0.008) and symptom duration >/=1 year (p < 0.001) were negatively associated with functional improvement by >/=1 Nurick grade. Independent factors negatively associated with "cure" after surgery included age >/=50 years (p = 0.005), preoperative Nurick grade >/=4 (p < 0.001) and symptom duration >/=1 year (p < 0.001). Early improvement in functional status was maintained in 90.5% and 76.3% of patients at 5 and 10 years follow-up respectively. On survival analysis, patients with shorter preoperative symptom duration (< 1 year) were more likely to demonstrate sustained improvement in functional status after surgery (p = 0.022) CONCLUSION.: Initial gains in functional status after central corpectomy for CSM and OPLL are maintained in over 75% of patients at 10 years after surgery. Overall, the most favorable long-term outcomes are achieved in younger patients who present early and with good preoperative functional status. LEVEL OF	**INT**	**JUL TO DEC**	**NEUROLOGICAL SCIENCES**	**PMID:**29068879 **Impact Factor:** 2.499 **H-Index:** 214

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	EVIDENCE: 4.				
605.	Sarkar, S., Philip, V. J., Cherukuri, S. K., Chacko, A. G. and Chacko, G. Implications of the World Health Organization definition of atypia on surgically treated functional and non-functional pituitary adenomas Acta Neurochirurgica; 2017, 159 (11): 2179-2186 **Address:** Department of Neurological Sciences, **Christian Medical College, Vellore,** India. Section of Neuropathology, Department of Pathology, **Christian Medical College, Vellore,** Tamil Nadu, 632004, India. geetachacko@cmcvellore.ac.in **BACKGROUND:** The World Health Organization (WHO) defines atypical pituitary adenomas as tumours with a MIB-1 labelling index >/=3%, p53 positivity and increased mitotic activity. Although a few reports have described the clinical and radiological correlates of atypia in pituitary adenomas, its impact on postoperative outcomes is not clearly defined. **METHOD:** We reviewed preoperative and postoperative records of patients undergoing surgery for pituitary adenomas. Postoperative outcomes for functional adenomas (FPAs) were assessed according to contemporary definitions of remission and recurrence. For non-functional pituitary adenomas (NFPAs), extent of resection and disease progression were defined on the basis of postoperative magnetic resonance imaging. **RESULTS:** Of 394 patients included for analysis, 29 cases (7.4%) fulfilled criteria for atypia. Patients with atypical tumours were significantly younger than those with typical adenomas. Remission was possible in 47.4% of FPAs, and was unrelated to the presence of atypia. In NFPAs, local invasiveness was negatively associated with extent of resection (OR, 0.255; 95% CI, 0.086-0.753; p < 0.001). In 93 NFPAs followed postoperatively with serial imaging over a mean duration of 37.5 months, disease progression/recurrence was significantly associated with the presence of atypia (OR, 5.058; 95% CI, 1.273-20.098; p = 0.021) on multivariate analysis. **CONCLUSIONS:** Patients with atypical non-functional pituitary adenomas are at risk for postoperative recurrence and disease progression, suggesting a need for adjuvant therapy. However, only a small fraction of pituitary tumours demonstrate atypia, as defined by the WHO, limiting its clinical utility.	**INT**	**JAN TO JUN**	**NEUROLOGICAL SCIENCES, PATHOLOGY**	**PMID:**28573325 **Impact Factor:** 1.881 **H-Index:** 78
606.	Sartelli, M., Labricciosa, F. M., Barbadoro, P., Pagani, L., Ansaloni, L., Brink, A. J., Carlet, J., Khanna, A., Chichom-Mefire, A., Coccolini, F., Di Saverio, S., May, A. K., Viale, P., Watkins, R. R., Scudeller, L., Abbo, L. M., Abu-Zidan, F. M.,	**INT**	**JUL TO DEC**	**CLINICAL PHARMACOLOGY**	**PMID:**28775763 **PMC ID:**5540347

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Adesunkanmi, A. K., Al-Dahir, S., Al-Hasan, M. N., Alis, H., Alves, C., Araujo Da Silva, A. R., Augustin, G., Bala, M., Barie, P. S., Beltran, M. A., Bhangu, A., Bouchra, B., Brecher, S. M., Cainzos, M. A., Camacho-Ortiz, A., Catani, M., Chandy, S. J., Jusoh, A. C., Cherry-Bukowiec, J. R., Chiara, O., Colak, E., Cornely, O. A., Cui, Y., Demetrashvili, Z., De Simone, B., De Waele, J. J., Dhingra, S., Di Marzo, F., Dogjani, A., Dorj, G., Dortet, L., Duane, T. M., Elmangory, M. M., Enani, M. A., Ferrada, P., Esteban Foianini, J., Gachabayov, M., Gandhi, C., Ghnnam, W. M., Giamarellou, H., Gkiokas, G., Gomi, H., Goranovic, T., Griffiths, E. A., Guerra Gronerth, R. I., Haidamus Monteiro, J. C., Hardcastle, T. C., Hecker, A., Hodonou, A. M., Ioannidis, O., Isik, A., Iskandar, K. A., Kafil, H. S., Kanj, S. S., Kaplan, L. J., Kapoor, G., Karamarkovic, A. R., Kenig, J., Kerschaever, I., Khamis, F., Khokha, V., Kiguba, R., Kim, H. B., Ko, W. C., Koike, K., Kozlovska, I., Kumar, A., Lagunes, L., Latifi, R., Lee, J. G., Lee, Y. R., Leppaniemi, A., Li, Y., Liang, S. Y., Lowman, W., Machain, G. M., Maegele, M., Major, P., Malama, S., Manzano-Nunez, R., Marinis, A., Martinez Casas, I., Marwah, S., Maseda, E., Mcfarlane, M. E., Memish, Z., Mertz, D., Mesina, C., Mishra, S. K., Moore, E. E., Munyika, A., Mylonakis, E., Napolitano, L., Negoi, I., Nestorovic, M. D., Nicolau, D. P., Omari, A. H., Ordonez, C. A., Paiva, J. A., Pant, N. D., Parreira, J. G., Pedziwiatr, M., Pereira, B. M., Ponce-De-Leon, A., Poulakou, G., Preller, J., Pulcini, C., Pupelis, G., Quiodettis, M., Rawson, T. M., Reis, T., Rems, M., Rizoli, S., Roberts, J., Pereira, N. R., Rodriguez-Bano, J., Sakakushev, B., Sanders, J., Santos, N., Sato, N., Sawyer, R. G., Scarpelini, S., Scoccia, L., Shafiq, N., Shelat, V., Sifri, C. D., Siribumrungwong, B., Soreide, K., Soto, R., De Souza, H. P., Talving, P., Trung, N. T., Tessier, J. M., Tumbarello, M., Ulrych, J., Uranues, S., Van Goor, H., Vereczkei, A., Wagenlehner, F., Xiao, Y., Yuan, K. C., Wechsler-Fordos, A., Zahar, J. R., Zakrison, T. L., Zuckerbraun, B., Zuidema, W. P. and Catena, F. The Global Alliance for Infections in Surgery: defining a model for antimicrobial stewardship-results from an international cross-sectional survey World J Emerg Surg; 2017, 12 34 Address: Department of Surgery, Macerata Hospital, Macerata, Italy. Department of Biomedical Sciences and Public Health, Unit of Hygiene, Preventive Medicine and Public Health, Universita Politecnica delle Marche, Ancona, Italy. Infectious Diseases Unit, Bolzano Central Hospital, Bolzano, Italy. General Surgery Department, Papa Giovanni XXIII Hospital, Bergamo, Italy. Department of Clinical microbiology, Ampath National Laboratory Services, Milpark Hospital, Johannesburg, South Africa.				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Division of Infectious Diseases and HIV Medicine, Department of Medicine, University of Cape Town, Cape town, South Africa. World Alliance against Antibiotics Resistance, Rome, Italy. Center for Critical Care, Anaesthesiology Institute and Department of Outcomes Research, Cleveland Clinic, Cleveland, OH USA. Department of Surgery and Obstetrics/Gynaecology, Regional Hospital, Limbe, Cameroon. Department of Surgery, Infermi Hospital, Rimini, Italy. Department of Surgery, Maggiore Hospital, Bologna, Italy. Department of Surgery, Vanderbilt University Medical Center, Nashville, Tennessee USA. Infectious Diseases Unit, Department of Medical and Surgical Sciences, Sant'Orsola Hospital, University of Bologna, Bologna, Italy. Division of Infectious Diseases, Cleveland Clinic Akron General, Akron, OH USA. Department of Medicine, Northeast Ohio Medical University, Rootstown, OH USA. Clinical Epidemiology Unit, IRCCS Policlinico San Matteo Foundation, Pavia, Italy. Division of Infectious Diseases, Jackson Health System, University of Miami Miller School of Medicine, Miami, FL USA. Department of Surgery, College of Medicine and Health Sciences, UAE University, Al-Ain, United Arab Emirates. Department of Surgery, College of Health Sciences, Obafemi Awolowo University, Ile-Ife, Nigeria. Division of Clinical and Administrative Sciences, College of Pharmacy, Xavier University of Louisiana, New Orleans, LA USA. Department of Medicine, Division of Infectious Diseases, University of South Carolina School of Medicine, Columbia, SC USA. General Surgery Department, Bakirkoy Dr Sadi Konuk Training and Research Hospital, Instanbul, Turkey. Unit of Prevention and Infection Control, Center of Hospital Epidemiology, Sao Joao Hospital Centre, Porto, Portugal. Infection Control Committee, Prontobaby Hospital da Crianca, Rio de Janeiro, Brazil. Department of Surgery, University Hospital Center, Zagreb, Croatia. Trauma and Acute Care Surgery Unit, Hadassah Hebrew University Medical Center, Jerusalem, Israel. Department of Surgery, Weill Cornell Medicine, New York, NY USA. Department of General Surgery, Hospital San Juan de Dios de La Serena, La				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Serena, Chile. Academic Department of Surgery, Queen Elizabeth Hospital, Birmingham, UK. Department of Microbiology National Reference Laboratory Cheikh Khalifa Ibn Zaid Hospital, Mohammed 6th University of Health Sciences, Casablanca, Morocco. Department of Pathology and Laboratory Medicine, VA Boston HealthCare System, Boston, MA USA. Department of Pathology and Laboratory Medicine, Boston University School of Medicine, Boston, MA USA. Department of Surgery, Hospital Clinico Universitario, Santiago de Compostela, Spain. Hospital Epidemiology and Infectious Diseases, Hospital Universitario Dr Jose Eleuterio Gonzalez, Monterrey, Mexico. Department of Emergency, Umberto I Hospital, Rome, Italy. Department of Pharmacology, Pushpagiri Institute of Medical Sciences and Research Centre, Thiruvalla, Kerala India. Department of General Surgery, Kuala Krai Hospital, Kuala Krai, Kelantan Malaysia. Division of Acute Care Surgery, Department of Surgery, University of Michigan, Ann Arbor, MI USA. Niguarda Hospital, Milano, Italy. Department of General Surgery, Health Sciences University, Samsun Training and Research Hospital, Samsun, Turkey. Department of Internal Medicine and Infectious Diseases, University of Cologne, Cologne, Germany. Department of Surgery, Tianjin Nankai Hospital, Nankai Clinical School of Medicine, Tianjin Medical University, Tianjin, China. Department General Surgery, Kipshidze Central University Hospital, Tbilisi, Georgia. Department of Digestive Surgery, Cannes Hospital, Cannes, France. Department of Critical Care Medicine, Ghent University Hospital, Ghent, Belgium. School of Pharmacy, Faculty of Medical Sciences, The University of the West Indies, St. Augustine, Trinidad and Tobago. Eric Williams Medical Sciences Complex, Uriah Butler Highway, Champ Fleurs, Trinidad and Tobago. Department of Surgery, Versilia Hospita, Lido di Camaiore, Italy. Department of Surgery, University Hospital of Trauma, Tirana, Albania. School of Pharmacy and Biomedicine, Mongolian National University of Medical Sciences, Ulaanbaatar, Mongolia.				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Microbiology, Bicetre Hospital, Paris-Sud University, La Kremlin-Bicetre, France. Department of Surgery, John Peter Smith Health Network, Fort Worth, Texas USA. Sudan National Public Health Laboratory, Federal Ministry of Health, Khartoum, Sudan. Department of Medicine, Infectious Disease Division, King Fahad Medical City, Riyadh, Saudi Arabia. Department of Surgery, Virginia Commonwealth University, Richmond, VA USA. Department of Surgery, Clinica Foianini, Santa Cruz, Bolivia. Department of Abdominal Surgery, Vladimir City Clinical Hospital of Emergency Medicine, Vladimir, Russia. Department of Surgery, Bharati Vidyapeeth Deemed University Medical College and Hospital, Sangli, Maharashtra India. Department of General Surgery, Mansoura Faculty of Medicine, Mansoura University, Mansoura, Egypt. Sixth Department of Internal Medicine, Hygeia General Hospital, Athens, Greece. Second Department of Surgery, Aretaieion University Hospital, National and Kapodistrian University of Athens, Athens, Greece. Center for Global Health, Mito Kyodo General Hospital, University of Tsukuba, Mito, Ibaraki Japan. University Department for Tumours, Sestre Milosrrdnice UHC, Zagreb, Croatia. General and Upper GI Surgery, Queen Elizabeth Hospital, Birmingham, UK. Peruvian Navy Medical Center, Lima, Peru. Department of Gastrointestinal Surgery, Santa Casa Hospital, Campo Grande, Brazil. Trauma and Trauma ICU, Inkosi Albert Luthuli Central Hospital and Department of Surgery, University of KwaZulu-Natal, Durban, South Africa. Department of General and Thoracic Surgery, University Hospital Giessen, Giessen, Germany. Department of Surgery, Faculty of Medicine, University of Parakou, BP 123 Parakou, Benin. Fourth Surgical Department, General Hospital G. Papanikolaou, Medical School, Aristotle University of Thessaloniki, Thessaloniki, Greece. Department of General Surgery, Erzincan University, Faculty of Medicine, Erzincan, Turkey. Department of Pharmacy, Lebanese, International University, Beirut, Lebanon. Drug Applied Research Center, Tabriz University of Medical Sciences, Tabriz, Iran.				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Division of Infectious Diseases, American University of Beirut, Beirut, Lebanon. Department of Surgery Philadelphia VA Medical Center, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA USA. Department of Microbiology, Gandhi Medical College, Bhopal, India. Clinic for Emergency Surgery, Medical Faculty University of Belgrade, Belgrade, Serbia. Third Department of General Surgery, Jagiellonian University Medical College, Krakow, Poland. Department of Abdominal Surgery, Regional Hospital of Tienen, Tienen, Belgium. Department of Internal Medicine, Royal Hospital, Muscat, Oman. Department of Emergency Surgery, City Hospital, Mozyr, Belarus. Department of Pharmacology and Therapeutics, College of Health Sciences, Makerere University, Kampala, Uganda. Department of Internal Medicine, Seoul National University Bundang Hospital, Seongnam, Republic of Korea. Department of Internal Medicine, National Cheng Kung University Hospital, Tainan, Taiwan. Department of Primary Care and Emergency Medicine, Kyoto University Graduate School of Medicine, Kyoto, Japan. Department of Surgery n. 2, Higher educational institutions of Ukraine Bukovina State Medical University, Chernivtci City, Ukraine. Section of Critical Care Medicine and Section of Infectious Diseases, Department of Medicine, Medical Microbiology and Pharmacology/Therapeutics, University of Manitoba, Winnipeg, MB Canada. Hospital Central Dr Ignacio Morones Prieto, San Luis Potosi, Mexico. Department of Surgery, Division of Trauma, University of Arizona, Tucson, AZ USA. Department of Surgery, Yonsei University College of Medicine, Seoul, South Korea. Texas Tech University, Health Sciences Center School of Pharmacy, Abilene, TX USA. Abdominal Center, University Hospital Meilahti, Helsinki, Finland. Department of Surgery, Inling Hospital, Nanjing University School of Medicine, Nanjing, China. Division of Infectious Diseases, Division of Emergency Medicine, Washington University School of Medicine, St. Louis, MO USA. Clinical Microbiology and Infectious Diseases, School of Pathology, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa. Department of Surgery, Universidad Nacional de Asuncion, Asuncion, Paraguay.				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department for Traumatology and Orthopedic Surgery, Cologne Merheim Medical Center (CMMC), University of Witten/Herdecke (UW/H), Cologne, Germany. Second Department of General Surgery, Jagiellonian University Medical College, Krakow, Poland. Health Research Program, Institute of Economic and Social Research, University of Zambia, Lusaka, Zambia. Clinical Research Center, Fundacion Valle del Lili, Cali, Colombia. First Department of Surgery, Tzaneion General Hospital, Piraeus, Greece. Service of General Surgery, Hospital Complex of Jaen, Jaen, Spain. Department of Surgery, Post-Graduate Institute of Medical Sciences, Rohtak, India. Servicio de Anestesia y Reanimacion, Hospital Universitario La Paz Madrid, Madrid, Spain. Department of Surgery, Radiology, University Hospital of the West Indies, Kingston, Jamaica. Infectious Diseases Division, Department of Medicine, Prince Mohamed Bin Abdulaziz Hospital, Ministry of Health, Riyadh, Saudi Arabia. Departments of Medicine, Clinical Epidemiology and Biostatistics, and Pathology and Molecular Medicine, McMaster University, Hamilton, ON Canada. Second Surgical Clinic, Emergency Hospital of Craiova, Craiova, Romania. Department of Microbiology, Tribhuvan University Teaching Hospital, Institute of Medicine, Kathmandu, Nepal. Department of Surgery, University of Colorado, Denver Health Medical Center, Denver, CO USA. Department of Surgery, Onandjokwe Hospital, Ondangwa, Namibia. Infectious Diseases Division, Warren Alpert Medical School of Brown University, Rhode Island Hospital, Providence, RI USA. Department of Surgery, University of Michigan, Ann Arbor, MI USA. Department of Surgery, Emergency Hospital of Bucharest, Bucharest, Romania. Clinic for General Surgery, Clinical Centre, Nis, Serbia. Center of Anti-Infective Research and Development, Hartford, CT USA. Department of Surgery, King Abdullah University Hospital, Irbid, Jordan. Department of Surgery and Critical Care, Universidad del Valle, Fundacion Valle del Lili, Cali, Colombia. Intensive Care Medicine Department, Centro Hospitalar Sao Joao, University of Porto, Porto, Portugal. Department of Microbiology, Grande International Hospital, Dhapasi, Kathmandu, Nepal.				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Surgery, Santa Casa de Sao Paulo School of Medical Sciences, Sao Paulo, Brazil. Department of General and Emergency Surgery, University Hospital Krakow, Krakow, Poland. Department of Surgery, University of Campinas, Campinas, Brazil. Laboratory of Clinical Microbiology, Department of Infectious Diseases, Instituto Nacional de Ciencias Medicas y Nutricion Salvador Zubiran, Mexico City, Mexico. Fourth Department of Internal Medicine and Infectious Diseases Unit, National and Kapodstrian University-Medical School, Attikon University General Hospital, Athens, Greece. John Farman Intensive Care Unit, University Hospitals, NHS Foundation Trust, Cambridge, UK. Infectious and Tropical Diseases Department, University Hospital of Nancy, and EA 4360 APEMAC, Lorraine University, Nancy, France. Department of General and Emergency Surgery, Riga East University Hospital 'Gailezers', Riga, Latvia. Department of Trauma, Hospital Santo Tomas, Panama, Panama. National Institute for Health Research, Health Protection Research Unit in Healthcare Associated Infections and Antimicrobial Resistance, Imperial College London, Hammersmith Campus, London, UK. Emergency Post-operative Department, Otavio de Freitas Hospital and Hosvaldo Cruz Hospital, Recife, Brazil. Department of General Surgery, Jesenice General Hospital, Jesenice, Slovenia. Trauma and Acute Care Service, St Michael's Hospital, University of Toronto, Toronto, Canada. Burns, Trauma and Critical Care Research Centre, The University of Queensland, Brisbane, Queensland Australia. Unidad Clinica Intercentros de Enfermedades Infecciosas, Microbiologia y Medicina Preventiva, Hospitales Universitarios Virgen Macarena y Virgen del Rocio-IBiS and Departamento de Medicina, Universidad de Sevilla, Seville, Spain. General Surgery Department, Medical University, University Hospital St George, Plovdiv, Bulgaria. JPS Health Network, Texas, TX USA. Hospital Center Tondela Viseu, Tondela, Portugal. Department of Aeromedical Services for Emergency and Trauma Care, Ehime University Graduate School of Medicine, Ehime, Japan. Department of Surgery, University of Virginia Health System, Charlottesville, VA				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	USA. Department of Surgery, University of Sao Paulo, Ribeirao Preto, Brazil. Unit of Hospital Pharmacy, Macerata Hospital, Macerata, Italy. Department of Pharmacology, Postgraduate Institute of Medical Education and Research, Chandigarh, India. Department of General Surgery, Tan Tock Seng Hospital, Tan Tock Seng, Singapore. Office of Hospital Epidemiology/Infection Prevention and Control, University of Virginia Health System, Charlottesville, VA USA. Department of Surgery, Faculty of Medicine, Thammasat University Hospital, Thammasat University, Pathum Thani, Thailand. Department of Gastrointestinal Surgery, Stavanger University Hospital, Stavanger, Norway. Department of Clinical Medicine, University of Bergen, Bergen, Norway. Department of Emergency Surgery and Critical Care, Centro Medico Imbanaco, Cali, Colombia. Department of Surgery, School of Medicine, Pontificia Universidade Catolica do Rio Grande do Sul (PUCRS), Porto Alegre, Brazil. Department of Surgery, North Estonia Medical Center, Tallinn, Estonia. Department of Molecular Biology, Tran Hung Dao Hospital, No 1, Tran Hung Dao Street, Hai Ba Trung Dist, Hanoi, Vietnam. Department of Infectious Diseases, John Peter Smith Health Network, Fort Worth, Texas USA. Institute of Infectious Diseases, Catholic University, Rome, Italy. First Department of Surgery-Department of Abdominal, Thoracic Surgery and Traumatology, General University Hospital, Prague, Czech Republic. Department of Surgery, Medical University of Graz, Graz, Austria. Department of Surgery, Radboud University Nijmegen Medical Center, Nijmegen, The Netherlands. Department of Surgery, Medical School University of Pecs, Pecs, Hungary. Department of Urology, Pediatric Urology and Andrology, Medical Faculty of the Justus Liebig University Giessen, Giessen, Germany. State Key Laboratory for Diagnosis and Treatment of Infectious Diseases, The First Affilliated Hospital, Zhejiang University, Zhejiang, China. Trauma and Emergency Surgery Department, Chang Gung Memorial Hospital, Taoyuan City, Taiwan. Department of Antibiotics and Infection Control, Rudolfstiftung Hospital, Vienna,				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Austria. Infection Control Unit, Angers University, CHU d'Angers, Angers, France. Division of Trauma and Surgical Critical Care, DeWitt Daughtry Family Department of Surgery, University of Miami, Miami, FL USA. Department of Surgery, University of Pittsburgh, Pittsburgh, PA USA. VU University Medical Center, Amsterdam, The Netherlands. Department of General Surgery, Maggiore Hospital, Parma, Italy. BACKGROUND: Antimicrobial Stewardship Programs (ASPs) have been promoted to optimize antimicrobial usage and patient outcomes, and to reduce the emergence of antimicrobial-resistant organisms. However, the best strategies for an ASP are not definitively established and are likely to vary based on local culture, policy, and routine clinical practice, and probably limited resources in middle-income countries. The aim of this study is to evaluate structures and resources of antimicrobial stewardship teams (ASTs) in surgical departments from different regions of the world. METHODS: A cross-sectional web-based survey was conducted in 2016 on 173 physicians who participated in the AGORA (Antimicrobials: A Global Alliance for Optimizing their Rational Use in Intra-Abdominal Infections) project and on 658 international experts in the fields of ASPs, infection control, and infections in surgery. RESULTS: The response rate was 19.4%. One hundred fifty-six (98.7%) participants stated their hospital had a multidisciplinary AST. The median number of physicians working inside the team was five [interquartile range 4-6]. An infectious disease specialist, a microbiologist and an infection control specialist were, respectively, present in 80.1, 76.3, and 67.9% of the ASTs. A surgeon was a component in 59.0% of cases and was significantly more likely to be present in university hospitals (89.5%, $p < 0.05$) compared to community teaching (83.3%) and community hospitals (66.7%). Protocols for pre-operative prophylaxis and for antimicrobial treatment of surgical infections were respectively implemented in 96.2 and 82.3% of the hospitals. The majority of the surgical departments implemented both persuasive and restrictive interventions (72.8%). The most common types of interventions in surgical departments were dissemination of educational materials (62.5%), expert approval (61.0%), audit and feedback (55.1%), educational outreach (53.7%), and compulsory order forms (51.5%). CONCLUSION: The survey showed a heterogeneous organization of ASPs worldwide, demonstrating the necessity of a multidisciplinary and collaborative approach in the battle against antimicrobial resistance in surgical infections, and the importance of educational efforts towards this goal.				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
607.	Sartelli, Massimo, Kluger, Yoram, Ansaloni, Luca, Carlet, Jean, Brink, Adrian, Hardcastle, Timothy C., Khanna, Ashish, Chicom-Mefire, Alain, Rodriguez-Bano, Jesus, Nathwani, Dilip, Mendelson, Marc, Watkins, Richard R., Pulcini, Celine, Beovic, Bojana, May, Addison K., Itani, Kamal M. F., Mazuski, John E., Fry, Donald E., Coccolini, Federico, Rasa, Kemal, Montravers, Philippe, Eckmann, Christian, Abbo, Lilian M., Abubakar, Salisu, Abu-Zidan, Fikri M., Adesunkanmi, Abdulrashid Kayode, Al-Hasan, Majdi N., Althani, Asma A., Ticas, Jorge Eduardo Alvarenga, Ansari, Shamshul, Ansumana, Rashid, Araujo Da Silva, Andre Ricardo, Augustin, Goran, Bala, Miklosh, Balogh, Zsolt J., Baraket, Oussema, Bassett, Matteo, Bellanova, Giovanni, Beltran, Marcelo A., Ben-Ishay, Ofir, Biffl, Walter L., Boermeester, Marja A., Brecher, Stephen M., Bueno, Juan, Cainzos, Miguel A., Cairns, Kelly, Camacho-Ortiz, Adrian, Ceresoli, Marco, **Chandy, Sujith J.,** Cherry-Bukowiec, Jill R., Cirocchi, Roberto, Colak, Elif, Corcione, Antonio, Cornely, Oliver A., Cortese, Francesco, Cui, Yunfeng, Curcio, Daniel, Damaskos, Dimitris, Das, Koray, Delibegovic, Samir, Deme-Trashvili, Zaza, De Simone, Belinda, De Souza, Hamilton Petry, De Waele, Jan, Dhingra, Sameer, Diaz, Jose J., Di Carlo, Isidoro, Di Marzo, Francesco, Di Saverio, Salomone, Dogjani, Agron, Dorj, Gereltuya, Dortet, Laurent, Duane, Therese M., Dupont, Herve, Egiev, Valery N., Eid, Hani O., Elmangory, Mutasim, Marei, Hany El-Sayed, Enani, Mushira Abdulaziz, Escandon-Vargas, Kevin, Faro Junior, Mario P., Ferrada, Paula, Foghetti, Domitilla, Foianini, Esteban, Fraga, Gustavo P., Frattima, Sabrina, Gandhi, Chinmay, Gattuso, Gianni, Giamarellou, Eleni, Ghnnam, Wagih, Gkiokas, George, Girardis, Massimo, Goff, Debbie A., Gomes, Carlos Augusto, Gomi, Harumi, Guerra Gronerth, Rosio Isabel, Guirao, Xavier, Guzman-Blanco, Manuel, Haque, Mainul, Hecker, Andreas, Hell, Markus, Herzog, Torsten, Hicks, Lauri, Kafka-Ritsch, Reinhold, Kao, Lillian S., Kanj, Souha S., Kaplan, Lewis J., Kapoor, Garima, Karamarkovic, Aleksandar, Kashuk, Jeffry, Kenig, Jakub, Khamis, Faryal, Khokha, Vladimir, Kiguba, Ronald, Kirkpatrick, Andrew W., Korner, Hartwig, Koike, Kaoru, Kok, Kenneth Y. Y., Kon, Kateryna, Kong, Victor, Inaba, Kenji, Ioannidis, Orestis, Isik, Arda, Iskandar, Katia, Labbate, Maurizio, Labricciosa, Francesco M., Lagrou, Katrien, Lagunes, Leonel, Latifi, Rifat, Lasithiotakis, Kostas, Laxminarayan, Ramanan, Lee, Jae Gil, Leone, Marc, Leppaniemi, Ari, Li, Yousheng, Liang, Stephen Y., Liau, Kui-Hin, Litvin, Andrey, Loho, Tonny, Lowman, Warren, Machain, Gustavo M., Maier, Ronald V., Manzano-Nunez, Ramiro, Marinis, Athanasios, Marmorale, Cristina, Martin-Loeches, Ignacio, Marwah, Sanjay, Maseda, Emilio, Mcfarlane, Michael, De Melo, Renato Bessa, Melotti, Maria Rita, Memish, Ziad, Mertz, Dominik, Mesina, Cristian, Menichetti, Francesco, Mishra, Shyam Kumar, Montori, Giulia, Moore, Ernest E., Moore,	**INT**	**JUL TO DEC**	**PHARMACOLOGY & CLINICAL PHARMACOLOGY**	**PMID:**29173054 **Impact Factor:**1.139 **H-Index:** 47

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Frederick A., Naidoo, Noel, Napolitano, Lena, Negoi, Ionut, Nicolau, David P., Nikolopoulos, Ioannis, Nord, Carl Erik, Ofori-Asenso, Richard, Olaoye, Iyiade, Omari, Abdelkarim H., Ordonez, Carlos A., Ouadii, Mouaqit, Ouedraogo, Abdoul-Salam, Pagani, Leonardo, Paiva, Jose Artur, Parreira, Jose Gustavo, Pata, Francesco, Pereira, Jorge, Pereira, Nuno R., Petrosillo, Nicola, Picetti, Edoardo, Pintar, Tadeja, Ponce-De-Leon, Alfredo, Popovski, Zagorka, Poulakou, Garyphallia, Preller, Jacobus, Guerrero, Adrian Puello, Pupelis, Guntars, Quiodettis, Martha, Rawson, Timothy M., Reichert, Martin, Reinhart, Konrad, Rems, Miran, Rello, Jordi, Rizoli, Sandro, Roberts, Jason, Rubio-Perez, Ines, Ruppc, Etienne, Sakakushev, Boris, Sall, Ibrahima, Kafil, Hossein Samadi, Sanders, James, Sato, Norio, Sawyer, Robert G., Scalea, Thomas, Scibe, Rodolfo, Scudeller, Luigia, Segovia Lohse, Helmut, Sganga, Gabriele, Shafiq, Nusrat, Shah, Jay N., Spigaglia, Patrizia, Suroowan, Shanoo, Tsioutis, Constantinos, Sifri, Costi D., Siribumrungwong, Boonying, Sugrue, Michael, Talving, Peep, Tan, Boun Kim, Tarasconi, Antonio, Tascini, Carlo, Tilsed, Jonathan, Timsit, Jean-Francois, Tumbarello, Mario, Ngo Tat, Trung, Ulrych, Jan, Uranues, Selman, Velmahos, George, Vereczkei, Andras G., Viale, Pierluigi, Vila Estape, Jordi, Viscoli, Claudio, Wagenlehner, Florian, Wright, Brian J., Xiao, Yonghong, Yuan, Kuo-Ching, Zachariah, Sanoop K., Zahar, Jean Ralph, Mergulhao, Paulo, Catena, Fausto and Members Global Alliance Infect, Sur A Global Declaration on Appropriate Use of Antimicrobial Agents across the Surgical Pathway. Surg Infect (Larchmt). 2017 Nov/Dec;18(8):846-853. doi: 10.1089/sur.2017.219. This declaration, signed by an interdisciplinary task force of 234 experts from 83 different countries with different backgrounds, highlights the threat posed by antimicrobial resistance and the need for appropriate use of antibiotic agents and antifungal agents in hospitals worldwide especially focusing on surgical infections. As such, it is our intent to raise awareness among healthcare workers and improve antimicrobial prescribing. To facilitate its dissemination, the declaration was translated in different languages. DOI: 10.1089/sur.2017.219				
608.	Satayraddi, A., Cherian, K. E., Kapoor, N., Rupali, P. and Paul, T. V. Multiple visceral abscesses in a patient with diabetes mellitus: a rare yet corrigible infection: melioidosis	**INT**	**JAN TO JUN**	**ENDOCRINOLOGY, INFECTIOUS DISEASES**	**PMID:**28134016 **Impact Factor:** 0.450 **H-Index:** 28

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Trop Doct; 2017, 49475516689539 **Address:** 1 Senior Resident, Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. 2 Associate Professor, Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. 3 Professor, Department of Infectious Diseases, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. 4 Professor, Department of Endocrinology, Diabetes and Metabolism, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India.				
609.	Sathyakumar, S., Cherian, K. E., Jebasingh, F., Hepzhibah, J., Kapoor, N. and Paul, T. V. Visual Vignette Endocr Pract; 2017, 23 (1): 116 **Address:** From the 1Department of Endocrinology, Diabetes & Metabolism, **Christian Medical College, Vellore,** India. Department of Nuclear Medicine, **Christian Medical College, Vellore,** India.	**INT**	**JAN TO JUN**	**ENDOCRINOLOGY, NUCLEAR MEDICINE**	**PMID:**27631840 **Impact Factor:** 2.347 **H-Index:** 68
610.	Sathyakumar, S., Paul, T. V., Asha, H. S., Gnanamuthu, B. R., Paul, M. J., Abraham, D. T., Rajaratnam, S. and Thomas, N. Ectopic cushing syndrome: a 10-year experience from a tertiary care center in Southern india. Endocr Pract. 2017 Aug;23(8):907-914. doi: 10.4158/EP161677.OR. Epub 2017 Jun 14. Comment in Endocr Pract. 2017 Aug;23 (8):1022-1023. **Address:** = equal contribution. From: **Christian Medical College, Vellore,** India. **OBJECTIVE:** Ectopic adrenocorticotropic hormone (ACTH) secretion is a less common cause of Cushing syndrome and is seen in 5 to 10% of cases with	**INT**	**JAN TO JUN**	**ENDOCRINE SURGERY, ENDOCRINOLOGY**	**PMID:**28614007 **Impact Factor:** 2.347 **H-Index:** 68

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	endogenous hypercortisolemia. We hereby describe our experience of patients with ectopic ACTH syndrome, who have been managed over the past 10 years at a tertiary care center in Southern India. **METHODS:** The inpatient and outpatient records of patients from 2006 to 2015 were retrospectively reviewed. The clinical features, clinical history, biochemical values, imaging features, including radiologic findings and positron emission tomography scans, management, details of follow-up, and outcomes, were documented. We compared the biochemical findings in these patients with 20 consecutive patients with Cushing disease (Cushing syndrome of pituitary origin). RESULTS: A total of 21 patients were studied. The median age at presentation was 34 years (range, 19 to 55 years). Seven patients had thymic carcinoid, 7 had bronchial carcinoid, 3 had lung malignancies, 2 had medullary carcinoma thyroid, 1 patient had a pancreatic neuroendocrine tumor, and 1 patient had an occult source of ACTH. The most common clinical features at presentation were muscle weakness (95%), hyperpigmentation (90%), facial puffiness (76%), easy bruising (61%), edema (57%), and striae (52%). Extensive acne was seen in a large number of patients (43%). Only 3 patients (14%) had central obesity. The median 8 am cortisol was 55.5 µg/dL (range, 3.8 to 131 µg/dL), median 8 am ACTH was 207 pg/Ml (range, 31.1 to 703 pg/mL), and the median 24-hour urinary free cortisol was 2,484 µg (range, 248 to 25,438 µg). Basal cortisol and ACTH, as well as midnight cortisol and ACTH level, were markedly higher in patients with ectopic Cushing syndrome as compared to patients with Cushing disease. Twelve of 21 patients had developed life-threatening infections by follow-up. Nine patients had undergone surgical intervention to address the primary tumor. However, only 1 patient exhibited a complete cure on follow-up. **CONCLUSION:** In our series, ectopic Cushing syndrome was most commonly seen in association with intrathoracic tumors such as bronchial or thymic carcinoid. Hyperpigmentation and proximal myopathy were frequent, while central obesity was uncommon. Early and rapid control of hypercortisolemia was important in order to prevent life-threatening infections and metabolic complications. ABBREVIATIONS: ACTH = adrenocorticotropic hormone CT = computed tomography DOTATATE = 68Ga-DOTA-Tyr3-octreotate ECS = ectopic Cushing syndrome FDG = fluorodeoxyglucose MTC = medullary thyroid cancer NET = neuroendocrine tumor PET = positron emission tomography. DOI: 10.4158/EP161677.OR				
611.	Sathyanarayana Rao, T. S., Jacob, K. S., Shaji, K. S., Raju, Msvk, Bhide, A. V., Rao, G. P., Saha, G. and Jagiwala, M.	**NAT**	**JAN TO JUN**	**PSYCHIATRY**	**PMID:**28529351 **Impact Factor:** 0.810

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Dementia and the International Classification of Diseases-11 (Beta Version) Indian J Psychiatry; 2017, 59 (1): 1-2 **Address:** Department of Psychiatry, JSS Medical College Hospital, JSS University, Mysore, Karnataka, India. Department of Psychiatry, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Psychiatry, Medical College, Thrissur, Kerala, India. President, Indian Psychiatric Society, IRSHA, Pune, Maharashtra, India. President Elect, Indian Psychiatric Society, St. Marthas Hospital, Bengaluru, Karnataka, India. Division of Schizophrenia and Psychopharmacology, Asha Hospital, Hyderabad, Telangana, India. General Secretary, Indian Psychiatric Society Clinic Brain, Kolkata, West Bengal, India. Treasurer, Brain Psycho Clinic and De Addiction Centre, Indian Psychiatric Society, Surat, Gujarat, India.				**H-Index:** 20
612.	Sato, T., Jose, J., Allai, A., El-Mawardy, M., Tolg, R., Richardt, G. and Abdel-Wahab, M. Effect of strut distribution on neointimal coverage of everolimus-eluting bioresorbable scaffolds: an optical coherence tomography study J Thromb Thrombolysis; 2017, **Address:** Heart Center, Segeberger Kliniken GmbH, Academic Teaching Hospital of the Universities of Kiel, Lubeck and Hamburg, Am Kurpark 1, 23795, Bad Segeberg, Germany. Cardiology, Tachikawa General Hospital, Nagaoka, Japan. **Christian Medical College Hospital, Vellore,** India. Heart Center, Segeberger Kliniken GmbH, Academic Teaching Hospital of the Universities of Kiel, Lubeck and Hamburg, Am Kurpark 1, 23795, Bad Segeberg, Germany. mohamed.abdel-wahab@segebergerkliniken.de. The thick struts of bioresorbable vascular scaffolds (BRS) are associated with changes in wall shear stress and contribute to neointimal proliferation. We aimed to evaluate the relationship between the BRS strut distribution and the neointimal proliferation. 50 lesions underwent optical coherence tomography, 12 months after BRS implantation. Scaffold area and neointimal thickness were evaluated in each cross-sectional area (CSA). Scaffold eccentricity was defined as follows: (maximum diameter - minimum diameter) x 100/maximum diameter. CSAs of BRS were divided into four quadrants. The maximal neointimal thickness (Maximal-NIT),	**INT**	**JAN TO JUN**	**CARDIOLOGY**	**PMID:**28597206 **Impact Factor:** 2.142 **H-Index:** 54

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Minimal-NIT and the number of struts in each quadrant were measured. The number of struts were classified as 1, 2, 3 and >/= 4. Furthermore, the mean-NIT acquired in each quadrant was divided by the average-NIT of all struts in the same CSA, which was defined as the unevenness score. In addition, Maximal-NIT minus Minimal-NIT was divided by the average-NIT of all struts in the same CSA, which was defined as heterogenicity of neointimal proliferation. There was a significant difference in the association between the number of struts and not only the unevenness score (no. of strut = 1 (N = 440), unevenness score 1.04 +/- 0.34; 2 (N = 696), 0.98 +/- 0.27; 3 (N = 994), 0.96 +/- 0.23; >/=4 (N = 1202), 1.04 +/- 0.22, P < 0.01) but also Maximal-NIT and Minimal-NIT. Furthermore, a significant correlation was observed between scaffold eccentricity in each CSA and the heterogeneity of neointimal proliferation in the same CSA (N = 892, R = 0.38, p = 0.01). Crowding of struts is associated with increased neointimal proliferation after BRS implantation. The scaffold eccentricity causes heterogeneity of neointimal proliferation.				
613.	Sato, T., Jose, J., El-Mawardy, M., Sulimov, D. S., Tolg, R., Richardt, G. and Abdel-Wahab, M. Neointimal response to everolimus-eluting bioresorbable scaffolds implanted at bifurcating coronary segments: insights from optical coherence tomography Int J Cardiovasc Imaging; 2017, 33 (2): 169-175 **Address:** Heart Center, Segeberger Kliniken GmbH, Academic Teaching Hospital of the Universities of Kiel, Lubeck and Hamburg, Am Kurpark 1, 23795, Bad Segeberg, Germany. Department of Cardiology, Tachikawa General Hospital, Nagaoka, Japan. Department of Cardiology, **Christian Medical College Hospital, Vellore,** India. Heart Center, Segeberger Kliniken GmbH, Academic Teaching Hospital of the Universities of Kiel, Lubeck and Hamburg, Am Kurpark 1, 23795, Bad Segeberg, Germany. mohamed.abdel-wahab@segebergerkliniken.de Heterogeneity of neointimal thickness is observed after drug-eluting stents implantation in bifurcation lesions (BL). We evaluated the vascular response of everolimus-eluting bioresorbable scaffold (BRS) struts deployed at BL using optical coherence tomography (OCT). 50 patients (64 scaffolds) underwent follow-up OCT after BRS implantation. Cross-sectional areas of each BL with a side branch more than 1.5 mm were analyzed using OCT every 200 microm. All images were divided	**INT**	**JAN TO JUN**	**CARDIOLOGY**	**PMID:**27757563 **Impact Factor:** 1.896 **H-Index:** 48

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	into three regions according to shear stress: the 1/2 circumference of the vessel opposite to the ostium (OO), the vessel wall adjacent to the ostium (AO) and the side-branch ostium (SO). The %uncovered strut and the averaged neointimal thickness (NIT) were calculated. Overall, there were significant differences in both NIT and %uncovered strut among the three regions (OO, 119.2 +/- 68.5 mum vs. AO, 94.2 +/- 35.7 mum vs. SO, 80.5 +/- 41.4 mum, p = 0.03; OO, 0.4 %vs. AO, 1.4 %vs. SO, 4.8 %, p = 0.02). Scaffolds were divided into two groups: a large-ratio side-branch group (LRSB; n = 32) and a small-ratio side-branch group (SRSB; n = 32), based on the median value of the ratio of the diameter of side branch ostium (Ds) to that of the main branch (Dm). In the LRSB alone, there were significant differences in both NIT and %uncovered strut among the three regions (OO, 128.0 +/- 61.1 mum vs. AO, 97.3 +/- 34.3 mum vs. SO, 75.9 +/- 39.4 mum, p < 0.01; OO, 0.3 % vs. AO, 2.3 % vs. SO, 8.7 %, p < 0.01). After BRS implantation in BL, neointimal response was pronounced at the vessel wall opposite to the side branch ostium, especially in those with large side branches.				
614.	Sato, T., Jose, J., El-Mawardy, M., Sulimov, D. S., Tolg, R., Richardt, G. and Abdel-Wahab, M. Predictors of acute scaffold recoil after implantation of the everolimus-eluting bioresorbable scaffold: an optical coherence tomography assessment in native coronary arteries Int J Cardiovasc Imaging; 2017, 33 (2): 145-152 **Address:** Heart Center, Segeberger Kliniken GmbH, Academic Teaching Hospital of the Universities of Kiel, Lubeck and Hamburg, Am Kurpark 1, 23795, Bad Segeberg, Germany. Cardiology, Tachikawa General Hospital, Nagaoaka, Japan. **Christian Medical College Hospital, Vellore,** India.Heart Center, Segeberger Kliniken GmbH, Academic Teaching Hospital of the Universities of Kiel, Lubeck and Hamburg, Am Kurpark 1, 23795, Bad Segeberg, Germany. mohamed.abdel-wahab@segebergerkliniken.de. This study investigated the predictors of acute recoil after implantation of everolimus-eluting BRS based on optical coherence tomography (OCT). Thirty-nine patients (56 scaffolds) were enrolled. Acute absolute recoil by quantitative coronary angiography was defined as the difference between the mean diameter of the last inflated balloon (X) and the mean lumen diameter of BRS immediately	**INT**	**JAN TO JUN**	**CARDIOLOGY**	**PMID:**27761749 **Impact Factor:** 1.896 **H-Index:** 48

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	after balloon deflation (Y). Acute percent recoil was defined as (X - Y) x 100/X. Plaque eccentricity (PE) and plaque composition (PC) were assessed by OCT. PC was classified into two different types: calcific (score = 1), fibrous and lipid (score = 0). Based on the mean acute scaffold recoil value of the present study, scaffolds were divided into two groups: the low acute recoil group (LAR, n = 34) and the high acute recoil group (HAR, n = 22). Acute percent and absolute recoil were 6.4 +/- 3.0 % and 0.19 +/- 0.11 mm. PE, PC score and scaffold/artery ratio were significantly higher in HAR than in LAR. In multivariate logistic regression analysis, PE > 1.49, PC score (score 1) and scaffold/artery ratio >1.07 were significant positive predictors for the occurrence of acute scaffold recoil (OR 10.7, 95 % CI 2.2-51.4, p < 0.01; OR 5.6, 95 % CI 1.9-22.0, p = 0.04; OR 12.4, 95 % CI 2.6-65.4, p < 0.01, respectively). Acute recoil of BRS is influenced by BRS sizing as well as OCT-derived plaque characteristics.				
615.	Satyaraddi, A., Cherian, K. E., Shetty, S., Kapoor, N., Jebasingh, F. K., Cherian, V. M., Hephzibah, J., Prabhu, A. J., Thomas, N. and Paul, T. V. Musculoskeletal oncogenic osteomalacia-An experience from a single centre in South India J Orthop; 2017, 14 (1): 184-188 **Address:** Department of Endocrinology, **Christian Medical College, Vellore,** India. Department of Orthopedics, **Christian Medical College, Vellore,** India. Department of Nuclear Medicine, **Christian Medical College, Vellore,** India. Department of Pathology, **Christian Medical College, Vellore,** India. **BACKGROUND:** Oncogenic osteomalacia is an acquired form of hypophosphatemic osteomalacia where the tumour resection may lead to cure of the disease. Tumours originating from the musculoskeletal region form an important subgroup of oncogenic osteomalacia. **METHODS:** This was a retrospective study conducted at a tertiary care centre in south India where we analyzed the hospital records of all the patients with musculoskeletal oncogenic osteomalacia from January 2010-April 2016. **RESULTS:** A total number of 73 patients were diagnosed to have adult onset hypophosphatemic osteomalacia out of which 13 patients (M: F = 6:7; mean age: 45.38 +/- 18.23 years) with musculoskeletal oncogenic osteomalacia were included in the study. Common presenting symptoms were bony pains, proximal myopathy and fractures. Mean	**INT**	**JAN TO JUN**	**ENDOCRINOLOGY, ORTHOPEDICS, NUCLEAR MEDICINE, PATHOLOGY**	**PMID:**28123260 **PMC:** 5222952 **Impact Factor:** 1.215 **H-Index:** 7

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	duration of symptoms from the initial hospital visit was 58.46 +/- 64.48 months. The initial mean fibroblast growth factor (FGF) 23 levels being 828.86 +/- 113.22 RU/ml (Normal range: 22-91). Imaging modalities used for localization of the tumour: DOTATATE PET/CT (8 patients), FDG PET/CT (3 patients), 1 patient (Both DOTATATE PET/CT and FDG PET/CT) and whole body Tc 99 m Red blood cell (RBC) blood pool scintigraphy (2 patients). 9 patients underwent surgery and all achieved remission. 4 patients denied surgical consent. **CONCLUSION:** Musculoskeletal oncogenic osteomalacia is a major subgroup of oncogenic osteomalacia which need more extensive whole body imaging for the localization of the tumour. Surgical excision often leads to remission of the disease.				
616.	Satyaraddi, A., Shetty, S., Kapoor, N., Cherian, K. E., Naik, D., Thomas, N. and Paul, T. V. Performance of risk assessment tools for predicting osteoporosis in south Indian rural elderly men Arch Osteoporos. 2017 Dec;12(1):35. doi: 10.1007/s11657-017-0332-5. Epub 2017 Apr 5. **Address:** Department of Endocrinology, Diabetes & Metabolism, **Christian Medical College, Vellore,** Tamil Nadu, 632004, India. Department of Endocrinology, Diabetes & Metabolism, **Christian Medical College, Vellore,** Tamil Nadu, 632004, India. thomasvpaul@yahoo.com Osteoporosis in elderly men is an under-recognized problem. In the current study, we intend to look at the performance of two risk assessment tools [OSTA and MORES] for the diagnosis of osteoporosis. Osteoporosis was seen in 1/4th of elderly men at spine and 1/6th of them at femoral neck. Both risk assessment tools were found to have good sensitivity in predicting osteoporosis at spine and femoral neck with good area under curve (AUC). **PURPOSE:** This study attempts to look at the performance of osteoporosis self-assessment tool for Asians (OSTA) and male osteoporosis risk estimation score (MORES) for predicting osteoporosis in south Indian rural elderly men. **METHODS:** Five hundred and twelve men above 65 years of age from a south Indian rural community were recruited by cluster random sampling. All subjects underwent detailed clinical, anthropometric, and bone mineral density measurement at lumbar spine and femoral neck using dual-energy X-ray absorptiometry scan. A T score </= - 2.5 was diagnostic of osteoporosis.	**INT**	**JAN TO JUN**	**ENDOCRINOLOGY**	**PMID:**28378274 **Impact Factor:** 1.960 **H-Index:** 16

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Scores for OSTA and MORES were calculated at various cut offs, and their sensitivities and specificities for predicting osteoporosis were derived. **RESULTS:** The prevalence of osteoporosis was found to be 16% at femoral neck and 23% at spine. OSTA with a cut-off value of </=2 predicted osteoporosis with a sensitivity and specificity at lumbar spine of 94 and 17% and at femoral neck of 99 and 18%. The area under ROC curve for OSTA index for spine was 0.716 and for femoral neck was 0.778. MORES with a cut-off value of >/=6 predicted osteoporosis at spine with a sensitivity of 98% and specificity of 15%, and at femoral neck, they were 98 and 13%, respectively. The area under ROC curve for MORES for spine was 0.855 and for femoral neck was 0.760. **CONCLUSION:** OSTA and MORES were found to be useful screening tools for predicting osteoporosis in Indian elderly men. These tools are simple, easy to perform, and cost effective in the context of rural Indian setting.				
617.	Scharf, R. J., Maphula, A., Pullen, P. C., Shrestha, R., Matherne, G. P., Roshan, R. and Koshy, B. Global Disability: Empowering Children of all Abilities Pediatr Clin North Am; 2017, 64 (4): 769-784 **Address:** Developmental Pediatrics, University of Virginia Children's Hospital, Box 800828, Stacey Hall, Charlottesville, VA 22903, USA. Electronic address: rebeccascharf@virginia.edu. Department of Psychology, University of Venda, Private Bag X5050, Thohoyandou 0950, South Africa. Department of Pediatrics, University of Virginia, Box 400273, Charlottesville, VA 22903, USA. Department of Psychology, Tribhuwan University, TU Road, Kirtipur, Kathmandu 44618, Nepal. Division of Pediatric Cardiology, University of Virginia Children's Hospital, Box 800386, Charlottesville, VA 22908-0386, USA. Developmental Paediatrics, **Christian Medical College,** Ida Scudder Road, Vellore, Tamil Nadu 632004, India. Worldwide, children are often not meeting their developmental potential owing to malnutrition, infection, lack of stimulation, and toxic stress. Children with disabilities are more likely to experience poverty, neglect, and abuse, and are less likely to have adequate access to education and medical care. Early childhood developmental stimulation can improve language, learning, and future participation	**INT**	**JUL TO DEC**	**DEVELOPMENTAL PAEDIATRICS**	**PMID:**28734509 **Impact Factor:** 2.241 **H-Index:** 71

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	in communities. Therapeutic supports and endeavors to reduce stigma for people of all abilities strengthen communities and allow for human thriving.				
618.	Selot, Ruchita, Arumugam, Sathyathithan, Mary, Bertin, Cheemadan, Sabna and Jayandharan, Giridhara R. Optimized AAV rh.10 Vectors That Partially Evade Neutralizing Antibodies during Hepatic Gene Transfer Front Pharmacol. 2017 Jul 17;8:441. doi: 10.3389/fphar.2017.00441. eCollection 2017. **Author information:** (1)Department of Biological Sciences and Bioengineering, Indian Institute of TechnologyKanpur, India. (2)Department of Hematology and Centre for Stem Cell Research (CSCR), Christian Medical CollegeVellore, India. Of the 12 common serotypes used for gene delivery applications, Adeno-associated virus (AAV)rh.10 serotype has shown sustained hepatic transduction and has the lowest seropositivity in humans. We have evaluated if further modifications to AAVrh.10 at its phosphodegron like regions or predicted immunogenic epitopes could improve its hepatic gene transfer and immune evasion potential. Mutant AAVrh.10 vectors were generated by site directed mutagenesis of the predicted targets. These mutant vectors were first tested for their transduction efficiency in HeLa and HEK293T cells. The optimal vector was further evaluated for their cellular uptake, entry, and intracellular trafficking by quantitative PCR and time-lapse confocal microscopy. To evaluate their potential during hepatic gene therapy, C57BL/6 mice were administered with wild-type or optimal mutant AAVrh.10 and the luciferase transgene expression was documented by serial bioluminescence imaging at 14, 30, 45, and 72 days post-gene transfer. Their hepatic transduction was further verified by a quantitative PCR analysis of AAV copy number in the liver tissue. The optimal AAVrh.10 vector was further evaluated for their immune escape potential, in animals pre-immunized with human intravenous immunoglobulin. Our results demonstrate that a modified AAVrh.10 S671A vector had enhanced cellular entry (3.6 fold), migrate rapidly to the perinuclear region (1 vs. >2 h for wild type vectors) in vitro, which further translates to modest increase in hepatic gene transfer efficiency in vivo. More importantly, the mutant AAVrh.10 vector was able to partially evade neutralizing antibodies (similar to 27-64 fold) in pre-immunized	**INT**	**JUL TO DEC**	**HEMATOLOGY AND CENTRE FOR STEM CELL RESEARCH**	**PMID:** 28769791 **PMCID:** **PMC**5511854 WOS:000406195900001 **Impact Factor:** 4.400 **H-Index:** 43

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	animals. The development of an AAV vector system that can escape the circulating neutralizing antibodies in the host will substantially widen the scope of gene therapy applications in humans. DOI: 10.3389/fphar.2017.00441 **PMID:**				
619.	Selvarajan, S., Reju, S., Pushpanathan, P., Arumugam, R., Padmanabhan, R., Kothandaramanujam, S. M., Srikanth, P. and Kang, G. Molecular characterisation and clinical correlates of rotavirus in children and adults in a tertiary care centre, Chennai, South India Indian J Med Microbiol; 2017, 35 (2): 221-227 **Address:** Department of Microbiology, Sri Ramachandra Medical College and Research Institute, Sri Ramachandra University, Chennai, Tamil Nadu, India. Division of Gastrointestinal Sciences, The Wellcome Trust Research Laboratory, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Paediatrics, Sri Ramachandra Medical College and Research Institute, Sri Ramachandra University, Chennai, Tamil Nadu, India. Department of General Medicine, Sri Ramachandra Medical College and Research Institute, Sri Ramachandra University, Chennai, Tamil Nadu, India. AIMS: This study was undertaken to determine the rate of detection of rotavirus causing diarrhoea among children and adults, identify the common genotypes circulating and determine clinical correlates. SETTINGS AND DESIGN: This is a cross-sectional study in a tertiary care centre. MATERIALS AND METHODS: Stool samples were collected from adults and children, transported on ice, aliquoted and stored at - 80 degrees C. Rotavirus antigen detection enzyme-linked immunosorbent assay was performed on all samples. Representative samples were typed by conventional hemi-nested VP7 and VP4 reverse transcription-polymerase chain reaction. STATISTICAL ANALYSIS USED: Test of proportion, Student's t-test and Chi-square test were used for statistical analysis. RESULTS: A total of 444 stool samples were collected and tested over 14 months. Among these, 116 were paediatric with a rate of positivity of 36.21% and 328 were adults with rate of positivity of 20.73%. Among children under 5 years (n = 90), the rate of positivity was 41.11%. Vesikari scale was used for clinical assessment. The mean +/- standard deviation Vesikari score in rotavirus-infected children and rotavirus-uninfected children was 11.2 +/- 3.2 and 8.9 +/- 3.6, respectively, and the difference was statistically significant. Nineteen samples were genotyped in	**NAT**	**JUL TO DEC**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28681810 **Impact Factor:** 1.149 **H-Index:** 38

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	children < 5 years, 94.7% were of G1P[8] and 5.3% were of G9P[4] genotype. Genotyping of 14 adult samples, G1P[8](85.7%) was found as the predominant genotype, two samples (14.3%) were partially typed (G9PUT and G12PUT). CONCLUSIONS: The rate of positivity of rotavirus in children under 5 years was 41.11%. G1P[8] is the most common strain circulating across all age groups.				
620.	SELVIN, Satheesh Solomon T; JACOB, Chris Elsa Samson; KURIAKOSE, Thomas. Usefulness of the Non-Contact Tonometry in Out-Patient Screening. Asian Journal of Ophthalmology, [S.l.], v. 15, n. 2, jan. 2016. 2017 15(2) **Address: Christian Medical College, Vellore**	**INT**	**JAN TO JUN**	**OPHTHALMOLOGY**	**Indexed in PubMed**
621.	Sen, I. and Agarwal, S. Cutaneous lesions from lymphangioma circumscriptum ANZ J Surg; 2017, 87 (6): E20-E21 **Address:** Department of Vascular Surgery, **Christian Medical College, Vellore,** Tamil Nadu, India.	**INT**	**JAN TO JUN**	**VASCULAR SURGERY**	**PMID:**25556623 **Impact Factor:** 1.513 **H-Index:** 64
622.	Sen, I. and Tripathi, R. K. Dialysis access-associated steal syndromes Semin Vasc Surg; 2016, 29 (4): 212-226 **Address:** Division of Vascular and Endovascular Surgery, **Christian Medical College, Vellore,** India. Narayana Institute of Cardiac Sciences, Narayana Healthcare, 258-A, Bommasandra Industrial Area, Hosur Road, Bangalore 560099, India. Electronic address: ramesh.tripathi@vascularsurgeon.org. Symptomatic hand ischemia has been reported in occur in up to 20% of patients undergoing upper-extremity dialysis access procedures, and is a common cause of postoperative steal in the patient with end-stage renal disease. The majority of dialysis access steal syndromes do not require operative intervention, but severe ischemia associated with muscle paralysis can progress to limb amputation if left untreated. In this review, patient risk factors, clinical presentation, diagnostic techniques, and management options for patients with dialysis access steal syndromes are discussed.	**INT**	**JUL TO DEC**	**VASCULAR AND ENDOVASCULAR SURGERY**	**PMID:**28779789 **Impact Factor:** 1.250 **H-Index:** 42
623.	Sen, S., Arunachalam, P., Sam, C. J. and Bal, H. S.	**INT**	**JAN TO**	**PAEDIATRIC**	**PMID:**28115405

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Residual terminal bowel fistulating into the alimentary tract: a hitherto unreported complication of surgery for anorectal malformation BMJ Case Rep; 2017, 2017 **Address:** Department of Paediatric Surgery, PSG Institute of Medical Sciences and Research, Coimbatore, Tamil Nadu, India. Department of Paediatric Surgery, **Christian Medical College, Vellore,** Tamil Nadu, India. The residual terminal bowel after pull-through surgery for anorectal malformation has been reported to cause urinary complications. We report two boys where residual bowel has fistulated postoperatively into the alimentary tract causing metabolic and septic complication in one and a large pelvic mass with urinary and rectal obstruction in the other.		**JUN**	**SURGERY**	**Impact Factor:**NA **H-Index:** 11
624.	Sengupta, M., Prabhakar, A. K., Satyendra, S., Thambu, D., Abraham, O. C., Balaji, V., Chen, H. W., Chao, C. C., Ching, W. M. and Prakash, J. A. Utility of Loop-mediated Isothermal Amplification Assay, Polymerase Chain Reaction, and ELISA for Diagnosis of Leptospirosis in South Indian Patients J Glob Infect Dis; 2017, 9 (1): 3-7 **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Viral and Rickettsial Diseases Department, Infectious Diseases Directorate, Naval Medical Research Center, Silver Spring, MD 20910, USA. **BACKGROUND:** Leptospirosis is a zoonotic disease which requires laboratory diagnosis for confirmation. **MATERIALS AND METHODS:** In this study serum samples from adults with acute undifferentiated fever (duration </=15 days) were tested for IgM antibodies to Leptospira by ELISA, PCR for rrs gene and loop-mediated isothermal amplification (LAMP) assay for LipL32 and LipL41. **RESULTS:** Among the 150 sera tested, three were positive by PCR, LAMP and IgM ELISA/modified Faines' criteria, two by only PCR; seven only by LAMP assay and forty fulfilled modified Faine's criteria (illness clinically compatible and IgM ELISA positive for leptospirosis). Clinical correlation revealed renal compromise, low	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY, MEDICINE**	**PMID:**28250618 **Impact Factor:** 0.820 **H-Index:** 16

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	platelet count and severe jaundice were significantly related to leptospirosis (P < 0.05). **CONCLUSION:** This study suggests that LAMP assay could be useful for diagnosis of leptospirosis during the 1st week of illness whereas IgM ELISA forms the mainstay of diagnosis from the 2nd week onward. Further studies especially community based, comparing ELISA, PCR, LAMP, culture and microscopic agglutination test are required to evaluate the veracity of these findings.				
625.	Senthilvelkumar, T. and Chandy, B. R. Paraplegia and transtibial amputation: successful ambulation after dual disability: a retrospective case report Spinal Cord Ser Cases; 2017, 3 16039 **Address:** Physiotherapy Unit, Department of Physical Medicine & Rehabilitation, **Christian Medical College, Vellore,** India. Department of Physical Medicine & Rehabilitation, **Christian Medical College, Vellore,** India. **INTRODUCTION:** This is a single-subject case report. The objective is to describe the unique rehabilitation outcome of an individual with motor complete T12 paraplegia and a right transtibial amputation. This study was conducted at the Department of Physical Medicine and Rehabilitation of **Christian Medical College** in India. CASE PRESENTATION: A 42-year-old policeman presented to our rehabilitation centre with motor complete T12 paraplegia and right transtibial amputation, 3 months following a road traffic accident. As the patient's goal was to walk, he was given a trial of independent ambulation with a customized prosthesis on the right side and a regular knee ankle foot orthosis (KAFO) on the left side. DISCUSSION: At the end of 12 weeks of rehabilitation, the patient was able to walk independently with the prosthesis/orthosis and bilateral elbow crutches. His Walking Index for Spinal Cord Injury (WISCI) score improved from 0/20 to 12/20 points. The scope of functional ambulation should not get restricted for a person with low thoracic spinal cord injury even when there is concurrent transtibial amputation.	**INT**	**JAN TO JUN**	**PHYSICAL MEDICINE & REHABILITATION**	**PMID:**28382211 **Impact Factor:** NA **H-Index:** NA
626.	Sethulakshmi S., Suma Susan Mathews True vocal fold cyst with fungal colonisation - an unusual cause of laryngitis Med-ej, The Tamil Nadu Dr. MGR Medical University, Chennai, April 2017	**NAT**	**JAN-JUN**	**OTOLARYNGOLOGY V / ENT UNIT 5**	**Not Indexed in PubMed**
627.	Shabeer, M. P., Abiramalatha, T., Smith, A., Shrestha, P., Rebekah, G., Meghala,	**INT**	**JAN TO**	**NEONATOLOG**	**PMID:**28369606

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	A. and Thomas, N. Comparison of Two Low-cost Methods of Cooling Neonates with Hypoxic Ischemic Encephalopathy J Trop Pediatr; 2017, 63 (3): 174-181 **Address:** Department of Neonatology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Biostatistics, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. **BACKGROUND:** Several low-cost methods are used in resource-limited settings to provide therapeutic hypothermia in asphyxiated neonates. There is inadequate data about their efficacy and safety. This is a retrospective study comparing two low-cost cooling methods-frozen gel packs (FGP) and phase changing material (PCM). **RESULTS:** There were 23 babies in FGP and 45 babies in the PCM group. Induction time was significantly shorter with FGP than PCM (45 vs. 90 minutes; p -value < 0.001). Proportion of temperature readings outside the target range was significantly higher (9.8% vs. 3.8%; p -value < 0.001) and fluctuation of core body temperature was wider (standard deviation of target temperature 0.4 degrees C vs. 0.28 degrees C) in the FGP group, compared with PCM group. **CONCLUSION:** Both FGP and PCM are effective and safe, comparable with standard servo-controlled cooling equipment. PCM has the advantage of better maintenance of target temperature with less nursing input, when compared with FGP.		**JUN**	**Y, BIOSTATISTICS**	**Impact Factor:** 1.093 **H-Index:** 44
628.	Shah, Ira, Lala, Mamatha and Damania, Kaizad Prevalence of HIV infection in pregnant women in Mumbai, India: Experience from 1993-2004 and 2008 Current Medical Issues; 2017, 15 (3): 240-242 **Address:**Department of Medicine, **CMC, Vellore**, Tamil Nadu, India Aim:Prevalence of HIV among pregnant women in India is of great concern, especially to prevent HIV in children. Mother–to-child transmission of HIV is the most common cause of transmission of HIV in children. Prevalence of HIV infection in pregnant women in India has ranged from 0.7 & 37; to 1.2%. Thus, estimating prevalence of HIV in pregnant women would aid in developing and prioritizing prevention of parent-to-child transmission of HIV programs.	**NAT**	**JAN TO JUN**	**MEDICINE UNIT V**	**Not Indexed in PubMed**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Materials and Methods:All pregnant women referred to the antenatal clinic from 1993 onward were tested for HIV infection by ELISA test after pretest counseling. A woman was diagnosed to be HIV infected if she tested positive on more than two HIV ELISA tests. Prevalence of HIV infection in them was calculated and also whether there was an increasing trend was determined. Results:A total of 123,439 pregnant women were tested for HIV from 1993 to 2004, of which 1797 women were HIV infected. Overall, the prevalence rate was found to be 1.4%. Prevalence rose from 0.76% in 1993 to 2.37% in 1998. However, from 2004, the prevalence has decreased to 0.6%. Conclusion:Prevalence of HIV in pregnant women in Mumbai is decreasing. http://www.cmijournal.org/text.asp?2017/15/3/240/212376				
629.	Shankar Kanagasabapathy. Satya Raj Depression, anxiety and Stress – A cross- sectional study in a cohort of school students from South. Journal of Evolution Medicine Dent. Science. May 2017	**NAT**	**JAN-JUN**	**PSYCHIATRY**	No PMID **Impact Factor:** 0.33 Indexed in: WOS, ICI, Ebsco
630.	Shankar, C., Nabarro, L. E. B., Anandan, S. and Veeraraghavan, B. Minocycline and Tigecycline: What Is Their Role in the Treatment of Carbapenem-Resistant Gram-Negative Organisms? Microb Drug Resist; 2017, 23 (4): 437-446 **Address:** Department of Clinical Microbiology, **Christian Medical College and Hospital, Vellore**, India. Carbapenem-resistant organisms are increasingly common worldwide, particularly in India and are associated with high mortality rates especially in patients with severe infection such as bacteremia. Existing drugs such as carbapenems and polymyxins have a number of disadvantages, but remain the mainstay of treatment. The tetracycline class of antibiotics was first produced in the 1940s. Minocycline, tetracycline derivative, although licensed for treatment of wide range of infections, has not been considered for treatment of multidrug-resistant organisms until recently and needs further in vivo studies. Tigecycline, a derivative of minocycline, although with certain disadvantages, has been frequently used in the treatment of carbapenem-resistant organisms. In this article, we review the properties of minocycline and tigecycline, the common mechanisms of resistance,	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY**	**PMID:**27564414 **Impact Factor:**2.306 **H-Index:** 58

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	and assess their role in the management of carbapenem-resistant organisms.				
631.	Shankar, C., Nabarro, L. E. B., Muthuirulandi Sethuvel, D. P., Raj, A., Devanga Ragupathi, N. K., Doss, G. P. and Veeraraghavan, B. Draft genome of a hypervirulent Klebsiella quasipneumoniae subsp. similipneumoniae with novel sequence type ST2320 isolated from a chronic liver disease patient J Glob Antimicrob Resist; 2017, 9 30-31 **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore** 632 004, Tamil Nadu, India. School of Bio Sciences and Technology, VIT University, Vellore, Tamil Nadu, India.Department of Clinical Microbiology, **Christian Medical College, Vellore** 632 004, Tamil Nadu, India. Electronic **Address:** vbalaji@cmcvellore.ac.in.	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY**	**PMID:**28323229 **Impact Factor:** 1.276 **H-Index:** 8
632.	Sharma, N. K., Olotu, B., Mathew, A., Waitman, L. R. and Rasu, R. Lumbar Spine Surgeries and Medication Usage During Hospital Stay: One-Center Perspective Hosp Pharm; 2017, 52 (11): 774-780 **Address:** University of Kansas Medical Center, Kansas City, KS, USA. West Coast University, Los Angeles, CA, USA. **Christian Medical College, Vellore,** India. University of Kansas, Lawrence, KS, USA. Background: Pain after spine surgery is usually managed with opioid and nonopioids. The rate of lumbar spine surgeries (LSS) is rising, but current practices on LSS are not known. A current trend in LSS and medication usage by age group is needed to gain a better understanding of how LSS and its pain management vary by age. Objective: The aim of this study was to report current practices of LSS of discectomy, laminectomy, and fusion in patients aged 18 and older and to gain an understanding of medication use for management of LSS. Methods: This retrospective study analyzed data of the University of Kansas Medical Center from 2007 to 2014 of patients (>18 years of age) undergoing laminectomy, discectomy, and fusion. Results: A total of 19 463 patients underwent LSS between 2007 and 2014 at Kansas University hospital. For the purpose of this study, 3115 patients' medical records were observed. A 50% increase in LSS between 2007 and 2014	**INT**	**JUL TO DEC**	**PHARMACOLOGY**	**PMID:**29276258 **PMCID:**5735758 **Impact Factor:** 0.430 **H-Index:** 19

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	was noted. Specifically, more than 2-fold increase in LSS was observed in patients aged 65 years and older. Among those aged 65 years and older, laminectomy was the most commonly performed surgery (69.6%) while discectomy was the most common surgery performed among those aged 18 to 34 (82.9%) and those aged 35 to 44 (72%). The medication use also increased with a highest usage in opioids alone (55%), followed by opioids combined with other analgesics (42.7%), regardless of lumbar surgery type or age. Conclusion: The information of increase in both LSS and the medication usage over the 7 years can be used to gain a better understanding of quality, expenditure, and outcomes following LSS. This knowledge may help health care providers plan patient care and rehabilitation services for older adults, as the trajectory of lumbar spine surgery is likely to rise with growing prevalence of older adults. The information regarding increased opioid utilization may also help clinicians to refine opioid usage and consider alternative approaches to manage acute postoperative pain, in light of the current concerns related to overutilization of opioids.				
633.	Sharma, P., Dahiya, S., Kumari, B., Balaji, V., Sood, S., Das, B. K. and Kapil, A. Pefloxacin as a surrogate marker for quinolone susceptibility in Salmonella enterica serovars Typhi & Paratyphi A in India Indian J Med Res; 2017, 145 (5): 687-692 **Address:** Department of Microbiology, All India Institute of Medical Sciences, New Delhi, India. Department of Clinical Microbiology, **Christian Medical College, Vellore,** India. BACKGROUND & OBJECTIVES: The emergence of resistance to fluoroquinolones in enteric fever despite the pathogen being susceptible by in vitro laboratory results, led to repeated changes in Clinical and Laboratory Standard Institute (CLSI) guidelines for this class of antibiotics to have specific and sensitive interpretative criteria. In 2015, CLSI added pefloxacin disk diffusion criteria as a surrogate marker for fluoroquinolone susceptibility. This study was carried out to evaluate the use of pefloxacin as a surrogate marker for ciprofloxacin, ofloxacin and levofloxacin susceptibility in clinical isolates of Salmonella Typhi and S. Paratyphi A. METHODS: A total of 412 strains of S. Typhi and S. Paratyphi A were studied for pefloxacin disk diffusion test as a surrogate marker for susceptibility to ciprofloxacin, ofloxacin and levofloxacin as per CLSI and the European Committee on Antimicrobial Susceptibility Testing (EUCAST) guidelines. Molecular mechanisms	**NAT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY**	**PMID:**28948961 **PMCID:**5644305 **Impact Factor:** 1.532 **H-Index:** 68

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	of resistance to fluoroquinolones were also determined and correlated with pefloxacin susceptibility breakpoints. RESULTS: Of the total 412 strains, 34 were susceptible to ciprofloxacin and 33 each to levofloxacin and ofloxacin using CLSI minimum inhibitory concentration (MIC) breakpoints. There was a positive correlation between MICs with correlation coefficients 0.917, 0.896 and 0.958 for the association between ciprofloxacin and ofloxacin, ciprofloxacin and levofloxacin and ofloxacin and levofloxacin, respectively (P <0.001). The sensitivity, specificity and positive predictive value of pefloxacin as a surrogate marker using ciprofloxacin MIC as a gold standard were 100, 99.5 and 94.4 per cent, while 100, 99.2 and 91.7 per cent taking ofloxacin and levofloxacin MIC as gold standard. Mutations in target genes correlated with the pefloxacin susceptibility results. INTERPRETATION & CONCLUSIONS: Our results showed that pefloxacin served as a good surrogate marker for the detection of susceptibility to ciprofloxacin, ofloxacin and levofloxacin in S. Typhi and S. Paratyphi A. Further studies are required to confirm these findings.				
634.	Sharma, S. K., Ryan, H., Khaparde, S., Sachdeva, K. S., Singh, A. D., Mohan, A., Sarin, R., Paramasivan, C. N., Kumar, P., Nischal, N., Khatiwada, S., Garner, P. and Tharyan, P. Index-TB guidelines: Guidelines on extrapulmonary tuberculosis for India Indian J Med Res; 2017, 145 (4): 448-463 **Address:** Department of Internal Medicine, All Institute of Medical Sciences, New Delhi, India. Cochrane Infectious Diseases Group, Liverpool, UK. Ministry of Health & Family Welfare, Government of India, New Delhi, India. Department of Medicine, Sri Venkateshwara Institute of Medical Sciences, Tirupati, India. National Institute of TB & Respiratory Diseases, New Delhi, India. Foundation for Innovative New Diagnostics- & South East Asia, New Delhi, India. National Tuberculosis Institute, Bengaluru, India. South Asian Cochrane Network & Centre, Vellore, India. Extrapulmonary tuberculosis (EPTB) is frequently a diagnostic and therapeutic challenge. It is a common opportunistic infection in people living with HIV/AIDS and other immunocompromised states such as diabetes mellitus and malnutrition. There is a paucity of data from clinical trials in EPTB and most of the information	**NAT**	**JUL TO DEC**	**SOUTH ASIAN COCHRANE NETWORK**	**PMID:**28862176 **PMCID:**5663158 **Impact Factor:** 1.532 **H-Index:** 68

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	regarding diagnosis and management is extrapolated from pulmonary TB. Further, there are no formal national or international guidelines on EPTB. To address these concerns, Indian EPTB guidelines were developed under the auspices of Central TB Division and Directorate of Health Services, Ministry of Health and Family Welfare, Government of India. The objective was to provide guidance on uniform, evidence-informed practices for suspecting, diagnosing and managing EPTB at all levels of healthcare delivery. The guidelines describe agreed principles relevant to 10 key areas of EPTB which are complementary to the existing country standards of TB care and technical operational guidelines for pulmonary TB. These guidelines provide recommendations on three priority areas for EPTB: (i) use of Xpert MTB/RIF in diagnosis, (ii) use of adjunct corticosteroids in treatment, and (iii) duration of treatment. The guidelines were developed using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) criteria, which were evidence based, and due consideration was given to various healthcare settings across India. Further, for those forms of EPTB in which evidence regarding best practice was lacking, clinical practice points were developed by consensus on accumulated knowledge and experience of specialists who participated in the working groups. This would also reflect the needs of healthcare providers and develop a platform for future research.				
635.	Shewade, H. D., Jeyashree, K., Mahajan, P., Shah, A. N., Kirubakaran, R., Rao, R. and Kumar, A. M. V. Effect of glycemic control and type of diabetes treatment on unsuccessful TB treatment outcomes among people with TB-Diabetes: A systematic review PLoS One; 2017, 12 (10): e0186697 **Address:** International Union Against Tuberculosis and Lung Disease (The Union), South-East Asia Office, New Delhi, India. International Union Against Tuberculosis and Lung Disease (The Union), Paris, France. Velammal Medical College Hospital & Research Institute, Madurai, India. All India Institute of Medical Sciences (AIIMS), Bhubaneswar, India. U.S. Agency for International Development (USAID), American Embassy, New Delhi, India. Cochrane South Asia, **Christian Medical College, Vellore,** India. Central TB Division, Revised National Tuberculosis Control Programme, Ministry of Health and Family Welfare, Government of India, New Delhi, India.	**INT**	**JUL TO DEC**	**SOUTH ASIAN COCHRANE NETWORK**	**PMID:**29059214 **PMCID:**5653348 **Impact Factor:** 2.806 **H-Index:** 218

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	BACKGROUND: Stringent glycemic control by using insulin as a replacement or in addition to oral hypoglycemic agents (OHAs) has been recommended for people with tuberculosis and diabetes mellitus (TB-DM). This systematic review (PROSPERO 2016:CRD42016039101) analyses whether this improves TB treatment outcomes. OBJECTIVES: Among people with drug-susceptible TB and DM on anti-TB treatment, to determine the effect of i) glycemic control (stringent or less stringent) compared to poor glycemic control and ii) insulin (only or with OHAs) compared to 'OHAs only' on unsuccessful TB treatment outcome(s). We looked for unfavourable TB treatment outcomes at the end of intensive phase and/or end of TB treatment (minimum six months and maximum 12 months follow up). Secondary outcomes were development of MDR-TB during the course of treatment, recurrence after 6 months and/or after 1 year post successful treatment completion and development of adverse events related to glucose lowering treatment (including hypoglycemic episodes). METHODS: All interventional studies (with comparison arm) and cohort studies on people with TB-DM on anti-TB treatment reporting glycemic control, DM treatment details and TB treatment outcomes were eligible. We searched electronic databases (EMBASE, PubMed, Google Scholar) and grey literature between 1996 and April 2017. Screening, data extraction and risk of bias assessment were done independently by two investigators and recourse to a third investigator, for resolution of differences. RESULTS: After removal of duplicates from 2326 identified articles, 2054 underwent title and abstract screening. Following full text screening of 56 articles, nine cohort studies were included. Considering high methodological and clinical heterogeneity, we decided to report the results qualitatively and not perform a meta-analysis. Eight studies dealt with glycemic control, of which only two were free of the risk of bias (with confounder-adjusted measures of effect). An Indian study reported 30% fewer unsuccessful treatment outcomes (aOR (0.95 CI): 0.72 (0.64-0.81)) and 2.8 times higher odds of 'no recurrence' (aOR (0.95 CI): 2.83 (2.60-2.92)) among patients with optimal glycemic control at baseline. A Peruvian study reported faster culture conversion among those with glycemic control (aHR (0.95 CI): 2.2 (1.1,4)). Two poor quality studies reported the effect of insulin on TB treatment outcomes. CONCLUSION: We identified few studies that were free of the risk of bias. There were limited data and inconsistent findings among available studies. We recommend robustly designed and analyzed studies including randomized controlled trials on the effect of glucose lowering treatment options on TB treatment outcomes.				
636.	Shyamkumar N. Keshava, Thomas Mammen, Edwin Stephen, Sunil Agarwal	**NAT**	**JAN-JUN**	RADIOLOGY,	**No PMID**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Reversible Rapid Neck Swelling FollowingCarotid Artery Stenting: A Case Report. J Clin Interv Radiol 2017 Apr;1(1):43–45			VASCULAR SURGERY	
637.	Shyamkumar N. Keshava1 Sanjeeva P. Kalva2 Let Us Learn from Our Complications J Clin Interv Radiol ISVIR 2017;1:137–138. **Address for correspondence:** 1.Department of Radiology, **Christian Medical College, Vellore,** Tamil Nadu, India aparna_shyam@cmcvellore.ac.in 2Division of Interventional Radiology, Department of Radiology, University of Texas Southwestern Medical Center, Dallas, Texas, United States	**NAT**	**JAN TO JUN**	**RADIOLOGY**	**Impact Factor:**
638.	Sil, A., Ravi, M. D., Patnaik, B. N., Dhingra, M. S., Dupuy, M., Gandhi, D. J., Dhaded, S. M., Dubey, A. P., Kundu, R., Lalwani, S. K., Chhatwal, J., Mathew, L. G., Gupta, M., Sharma, S. D., Bavdekar, S. B., Rout, S. P., Jayanth, M. V., D'cor, N. A., Mangarule, S. A., Ravinuthala, S. and Reddy, E. J. Effect of prophylactic or therapeutic administration of paracetamol on immune response to DTwP-HepB-Hib combination vaccine in Indian infants Vaccine; 2017, 35 (22): 2999-3006 **Address:** Shantha Biotechnics Private Limited - A Sanofi Company, Hyderabad, India. Electronic **Address:** arijit.sil@sanofi.com. Dept. of Pediatrics, JSS Medical College, Mysore, India. Shantha Biotechnics Private Limited - A Sanofi Company, Hyderabad, India. Sanofi Pasteur, Swiftwater, USA. Sanofi Pasteur, Marcy-l'Etoile, France. Dept. of Pediatrics, SBKS MI & RC, Sumandeep Vidyapeeth, Vadodara, India. Dept. of Pediatrics, KLE University's, Jawaharlal Nehru Medical College, Belagavi, India. Dept. of Pediatrics, Maulana Azad Medical College, Delhi, India. Dept. of Pediatrics, Institute of Child Health, Kolkata, India. Dept. of Pediatrics, Bharati Vidyapeeth Deemed University Medical College, Pune, India. Dept. of Pediatrics, **Christian Medical College,** Ludhiana, India. Dept. of Pediatrics, **Christian Medical College, Vellore,** India. Dept. of Community Medicine, School of Public Health, Post Graduate Institute of Medical Education & Research, Chandigarh, India. Dept. of Pediatrics, Sawai Man Singh Medical College, Jaipur, India. Dept. of Pediatrics, Topiwala National Medical College and BYL Nair Ch. Hospital,	**INT**	**JAN TO JUN**	**PEDIATRICS**	**PMID:**28449972 **Impact Factor:**3.235 **H-Index:** 151

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Mumbai, India. **BACKGROUND:** Vaccination is considered as the most cost effective method for preventing infectious diseases. Low grade fever is a known adverse effect of vaccination. In India, it is a common clinical practice to prescribe paracetamol either prophylactically or therapeutically to manage fever. Some studies have shown that paracetamol interferes with antibody responses following immunization. This manuscript reports the outcome of a post hoc analysis of data from a clinical trial of a pentavalent vaccine in Indian infants where paracetamol was not used or was used either as prophylaxis or for treatment of fever. **METHODS:** Pre and post vaccine antibody levels against Diphtheria, Tetanus, Pertussis, Hepatitis B, Haemophilus influenzae type B were assessed in no paracetamol and paracetamol groups. The paracetamol group was further divided into prophylactic and treatment groups. **RESULTS:** Similar rates of seroprotection/seroresponse for anti-D, anti-T, anti-wP, anti-PT, anti-HBs and anti-PRP were observed in all the groups. There was no clear tendency for difference in percentage seroprotection/seroresponse and geometric mean (GM) titers in any of the groups. **CONCLUSION:** The study found no evidence that paracetamol usage either as prophylactic or for treatment impact immunological responses to DTwP-HepB-Hib combination vaccine. [Clinical trial registry of India (study registration number CTRI/2012/08/002872)].				
639.	**Simha Arathi** Roddam1*, Irodi Aparna2, Sniya Valsa Sudhakar2 and Sarada David3 MRI of Orbital Pathology : An Overview for the Ophthalmologist BAOJ Ophthalmology 2017 V-1(1):004: 1-10 ***Corresponding author:** Irodi Aparna, Dept of Radiodiagnosis, Christian Medical College-Vellore, Vellore-632004, Fax: 0091- 416- 2232035, Tel: 0091- 416-2283012; E-mail: aparnashyam@gmail.com Abstract:Meaningful interpretation of orbital pathology on Magnetic Resonance Imaging (MRI) is best done in a systematic approach. This involves differentiating pathology from normal, identifying the appropriate surgical space in which a lesion is situated, relationship to the surrounding structures as well as estimation of its size, signal and enhancement characteristics. This article aims to cover the MRI features of commonly imaged ocular and orbital pathologies.	**INT**	**JAN TO JUN**	**OPHTHALMOLOGY**	**NOT INDEXED IN PUBMED**
640.	Simon E.*1,2, Wardle R.2, Thi A.A.3, Eldridge J.4, Samuel S.2, Moran G.2 Poster presentations: Clinical: Diagnosis and outcome (2017) - P128 Diagnostic	**INT**	**JUL TO DEC**	**GASTROENTEROLOGY**	**NO PMID WOS:**000398606

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	accuracy of faecal calprotectin in Crohn's disease – Does disease location matter? Journal of Crohns & Colitis; 2017, 11 S141-S142 **AUTHOR INFORMATION:** 1**Christian Medical College,** Gastroenterology, Vellore, India 2NIHR NDD BRU, NUH NHS Trust and University of Nottingham, Nottingham, United Kingdom 3NUH NHS Trust, Gastroenterology, Nottingham, United Kingdom 4University of Nottingham, Libraries Research & Learning Resources, Nottingham, United Kingdom Background: Faecal calprotectin (FC) is a highly sensitive disease activity biomarker in Inflammatory Bowel Disease. However there are conflicting reports on whether the diagnostic accuracy in Crohn's disease (CD) is influenced by disease location. The aim of this study is to undertake a systematic review of published literature to compare the sensitivity and specificity of FC to accurately measure disease activity at small bowel (SB) vs large bowel (LB) location. Methods: Databases (Medline, Embase, Web of Science and Cochrane) were searched from inception to November 8th 2016 for cohort and case control studies which had data on FC in patients with isolated SB and LB CD. Similarly, relevant conference proceedings were searched from 2005–2016. There was neither age nor language restriction. The reference standard for activity was either endoscopy, magnetic resonance imaging, computed tomography, technetium scan or a combination of these. We excluded studies reporting on post-operative CD or on a specific disease location in isolation. Screening was done independently in duplicate (EGS, RW), with any disagreements resolved by 2 other authors (GWM, SS). EGS & GWM independently completed data extraction form. To assess the risk of bias; EGS & GWM used QUADAS-2, a research tool to check the quality of systematic reviews of diagnostic accuracy studies. Any disagreement was resolved by consensus with co-authors. Communication was undertaken with all lead authors in order to obtain missing data sets. Whenever possible, sensitivities and specificities were obtained from the raw data or as reported in the publication. Results: 5619 records were identified at initial search. 2098 duplicates were removed and 3521 records were screened. From the latter, 61 full text articles were then assessed for eligibility. 45 studies were later excluded and 16 studies were included in the final review, with sensitivities and specificities per disease location available from seven studies. The sensitivity of FC in the SB location				900256 **Impact Factor:** 5.813 **H-Index:** 47

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	ranged from 42.9% to 100% with a median of 75%, while that in the LB location ranged from 78.9% to 100% with a median of 94%. FC specificity in the SB location ranged from 50% to 100% while that in the LB location ranged from 28.6% to 100% with similar median specificities of 75% and 71% respectively. Conclusion: The sensitivity of FC to accurately measure disease activity for CD in the SB appears to be lower than that in the LB. Limitations of the study include heterogeneity associated with the cut offs of FC, disease spectrum, study design, gold standard used and quality of studies as well as insufficient raw data.				
641.	Sindhu, K. N. C., Babji, S. and Ganesan, S. K. Impact of rotavirus vaccines in low and middle-income countries Curr Opin Infect Dis; 2017, 30 (5): 473-481 **Address:** Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. PURPOSE OF REVIEW: Rotavirus vaccines are playing a pivotal role in improving lives of infants and young children in low and middle-income countries (LMICs). Many of these countries have adopted the vaccine into their routine immunization, whereas others are considering introduction. This article provides an update on the impact of rotavirus vaccines in LMICs on morbidity and mortality in children aged less than 5 years, and their cost-effectiveness. RECENT FINDINGS: The WHO, in 2013, updated its recommendation to prioritize introduction of rotavirus vaccines in the routine immunization schedule, without age restrictions. Despite the decreased efficacy of the vaccines in LMICs, data from Sub-Saharan Africa have demonstrated a decrease in rotavirus-related morbidity, with some sites reporting an indirect protective effect on children age ineligible to receive the vaccine. Even with improvements in sanitation, nutritional status in children, and other health-related indices in LMICs, the use of rotavirus vaccines will play an important role in preventing rotavirus-related gastroenteritis. Economic models predict a reduction in economic burden because of rotavirus-related health costs, making vaccine introduction cost-effective in resource-constrained settings. SUMMARY: Increasing evidence from impact studies shows the significant impact of rotavirus vaccination on hospitalizations and economic burden because of rotavirus gastroenteritis in LMICs. Universal rotavirus vaccination is recommended, and introductions should be monitored by robust surveillance systems to measure effectiveness and impact.	**INT**	**JUL TO DEC**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28719399 **Impact Factor:** 4.242 **H-Index:** 86
642.	Sindhu, K. N., Cunliffe, N., Peak, M., Turner, M., Darby, A., Grassly, N., Gordon,	**INT**	**JAN TO**	**GASTROINTE**	**PMID:**28360258

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	M., Dube, Q., Babji, S., Praharaj, I., Verghese, V., Iturriza-Gomara, M. and Kang, G. Impact of maternal antibodies and infant gut microbiota on the immunogenicity of rotavirus vaccines in African, Indian and European infants: protocol for a prospective cohort study BMJ Open; 2017, 7 (3): e016577 **Address:** Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. University of Liverpool, Liverpool, UK. Alder Hey Children's NHS Foundation Trust, Liverpool, UK. London School of Hygiene and Tropical Medicine, London, UK. Malawi College of Medicine, Malawi. Department of Child Health, **Christian Medical College, Vellore,** Tamil Nadu, India. **INTRODUCTION:** Gastroenteritis is the leading cause of morbidity and mortality among young children living in resource-poor settings, majority of which is attributed to rotavirus. Rotavirus vaccination can therefore have a significant impact on infant mortality. However, rotavirus vaccine efficacy in Sub-Saharan Africa and Southeast Asia is significantly lower than in high-income countries. Maternally derived antibodies, infant gut microbiota and concomitant oral polio vaccination have been proposed as potential reasons for poor vaccine performance in low-income settings. The overall aim of this study is to compare the role of maternally derived antibodies and infant gut microbiota in determining immune response to rotavirus vaccine in high-income and low-income settings, using the same vaccine and a similar study protocol. METHODS AND ANALYSIS: The study is an observational cohort in three countries-Malawi, India and UK. Mothers will be enrolled in third trimester of pregnancy and followed up, along with infants after delivery, until the infant completes two doses of oral rotavirus vaccine (along with routine immunisation). The levels of prevaccination maternally derived rotavirus-specific antibodies (IgG) will be correlated with infant seroconversion and antibody titres, 4 weeks after the second dose of rotavirus vaccine. Both within-country and between-country comparisons of gut microbiome will be carried out between children who seroconvert and those who do not. The impact of oral polio vaccine coadministration on rotavirus vaccine response will be studied in Indian infants. ETHICS AND DISSEMINATION: Ethical approvals have been obtained from Integrated Research Application System (IRAS, NHS ethics) in UK, College of		**JUN**	**STINAL SCIENCES, CHILD HEALTH**	**Impact Factor:** 2.369 **H-Index:** 47

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Medicine Research and Ethics Committee (COMREC) in Malawi and Institutional Review Board (IRB), **Christian Medical College, Vellore** in India. Participant recruitment and follow-up is ongoing at all three sites. Analysis of data, followed by publication of the results, is expected in 2018.				
643.	Singh O, George AJP, Singh JC, **Devasia A** Transitional cell carcinoma of the renal pelvis with venous tumor thrombus Rev Urol.2017;19(2):145-148	**INT**	**JAN-JUN**	**UROLOGY**	**PMID:**28959157 **PMCID:**PMC5610370 **Impact Factor:** 1.13 Indexed in: Pubmed
644.	Singh, O. and Kekre, N. S. "Flying-saucer in the pelvis" sign: An equivalent of "pelvic Mickey mouse" sign Indian J Urol; 2017, 33 (2): 173-174 **Address:** Department of Urology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Isolated bilateral inguinal vesical hernia with urinary bladder as the only content is very rare. "Pelvic Mickey mouse" sign is a radiological sign described classically for bilateral inguinal vesical hernia on transverse axial imaging. Another imaging finding of a "Flying-saucer in the pelvis" sign seen on conventional intravenous urography is being presented.	**NAT**	**JAN TO JUN**	**UROLOGY**	**PMID:**28469311 **Impact Factor:** 5.157 **H-Index:** 21
645.	Singh, O., Mukherjee, P. and Devasia, A. The negative pyelogram in urinary obstruction Indian J Urol; 2017, 33 (2): 169-170 **Address:** Department of Urology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. A case of chronic ureteral obstruction secondary to radiation-related ureteral stricture producing a classic "negative pyelogram" on intravenous urography is	**NAT**	**JAN TO JUN**	**UROLOGY**	**PMID:**28469309 **Impact Factor:** 5.157 **H-Index:** 21

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	presented.				
646.	Singh, O., Muthukrishna Pandian, R. and Sudhakar Kekre, N. Alkaptonuric Ochronosis Urology; 2017, 100 e3-e4 **Address:** Department of Urology, **Christian Medical College and Hospital, Vellore**, Tamilnadu, India. Electronic **Address:** dronkarsingh@gmail.com Department of Urology, **Christian Medical College and Hospital, Vellore**, Tamilnadu, India. Alkaptonuria is a rare autosomal recessive disorder of tyrosine metabolism. Deficiency of homogentisate 1,2 dioxygenase results in accumulation of oxidized homogentisic acid in the connective tissues of the skin, eyes and ears, musculoskeletal system, and cardiac valves, and in urolithiasis. Excretion of excessive homogentisic acid in urine causes dark-colored urine on exposure to air. We present a case of alkaptonuria with multiple system involvement, who presented with lower urinary tract symptoms secondary to vesical and prostatic calculi.	**INT**	**JAN TO JUN**	**UROLOGY**	**PMID:**27816602 **Impact Factor:** 2.309 **H-Index:** 156
647.	Singhal, H., Premkumar, P. S., Chandy, A., Kunjummen, A. T. and Kamath, M. S. Patient Experience with Conscious Sedation as a Method of Pain Relief for Transvaginal Oocyte Retrieval: A Cross Sectional Study J Hum Reprod Sci; 2017, 10 (2): 119-123 **Address:** Reproductive Medicine Unit, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India. AIM: The aim of the study was to measure patient's satisfaction level and acceptance of conscious sedation as a method of pain relief following transvaginal oocyte retrieval (TVOR) during assisted reproduction technology treatment. We also evaluated the factors that may influence the efficacy of conscious sedation method. SETTING AND DESIGN: A prospective cross-sectional study. MATERIALS AND METHODS: Prospective study was conducted from October 2015 to January 2016 at a university-level hospital and 100 women were recruited. Variables for analysis included woman age, duration of procedure, number of oocytes retrieved, and transmyometrial passage of the needle. Pain assessment was done by visual	**INT**	**JUL TO DEC**	**REPRODUCTIVE MEDICINE UNIT, BIOSTATISTICS**	**PMID:**28904501 **PMCID:**5586085 **Impact Factor:** 1.590 **H-Index:** 17

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	analog scale (VAS). Medical complications, and patient satisfaction score [Likert's score and client satisfaction questionnaire (CSQ)] were recorded. RESULTS: There was a moderate positive correlation between age and pain score on day 1 post-procedure. When the duration of procedure was >12 min, immediate post-procedure pain score was significantly higher compared to those whose procedure where duration was <12 min. There was no correlation between pain score and the number of oocytes retrieved (</=5, 6-15, and >/=16) and transmyometrial passage of needle. The VAS 10-point score immediately post-procedure, after 6 and 24 h post-procedure, and on day of embryo transfer was 2.83 (+/-1.67), 0.78 (+/-1.04), 0.39 (+/-1.09), and 0.14 (+/-0.58), respectively. The Likert's score was 3.65 (+/-0.82) and mean CSQ was 27.04 (+/-3.01). Majority of the women (86%) preferred the same pain relief method for future analgesia. There were no major complications. CONCLUSION: Conscious sedation was associated with high satisfaction level and acceptance rate among patients undergoing TVOR.				
648.	Singhi, S., Rungta, N., Nallasamy, K., Bhalla, A., Peter, J. V., Chaudhary, D., Mishra, R., Shastri, P., Bhagchandani, R. and Chugh, T. D. Tropical Fevers in Indian Intensive Care Units: A Prospective Multicenter Study Indian J Crit Care Med. 2017 Dec;21(12):811-818. doi: 10.4103/ijccm.IJCCM_324_17. **Address:** Professor Emeritus Pediatrics, PGIMER, Chandigarh, Haryana, India. Critical Care Medicine, Jeevanrekha Critical Care and Trauma Hospital, Jaipur, Rajasthan, India. Department of Pediatrics, PGIMER, Chandigarh, Haryana, India. Department of Internal Medicine, PGIMER, Chandigarh, Haryana, India. Critical Care Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Pulmonology and Critical Care, PGIMS, Haryana, India. Critical Care Medicine, Sanjivani Super Speciality Hospital, Ahmedabad, Gujarat, India. Critical Care Medicine, Sir Ganga Ram Hospital, New Delhi, India. Critical Care Medicine, Apex Hospital, Bhopal, Madhya Pradesh, India. Professor Emeritus Pathology, PGIMS, Rohtak, Haryana, India. Background and Aims: Infections in tropics often present as undifferentiated fevers with organ failures. We conducted this nationwide study to identify the prevalence, profile, resource utilization, and outcome of tropical fevers in Indian Intensive Care	**NAT**	**JUL TO DEC**	**CRITICAL CARE MEDICINE,**	**PMID:**29307960 **PMC ID:**5752788 **Impact Factor:** 0.76 H Index: 19 Indexed in:Scopus, Embase, Pubmed, ICI

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Units (ICUs). Materials and Methods: This was a multicenter prospective observational study done in 34 ICUs across India (July 2013-September 2014). Critically ill adults and children with nonlocalizing fever >48 h and onset < 14 days with any of the following: thrombocytopenia/rash, respiratory distress, renal failure, encephalopathy, jaundice, or multiorgan failure were enrolled consecutively. Results: Of 456 cases enrolled, 173 were children <12 years. More than half of the participants (58.7%) presented in postmonsoon months (August-October). Thrombocytopenia/rash was the most common presentation (60%) followed by respiratory distress (46%), encephalopathy (28.5%), renal failure (23.5%), jaundice (20%), and multiorgan failure (19%). An etiology could be established in 365 (80.5%) cases. Dengue (n = 105.23%) was the most common followed by scrub typhus (n = 83.18%), encephalitis/meningitis (n = 44.9.6%), malaria (n = 37.8%), and bacterial sepsis (n = 32.7%). Nearly, half (35% invasive; 12% noninvasive) received mechanical ventilation, a quarter (23.4%) required vasoactive therapy in first 24 h and 9% received renal replacement therapy. Median (interquartile range) ICU and hospital length of stay were 4 (3-7) and 7 (5-11.3) days. At 28 days, 76.2% survived without disability, 4.4% had some disability, and 18.4% died. Mortality was higher (27% vs. 15%) in patients with undiagnosed etiology (P < 0.01). On multivariate analysis, multiorgan dysfunction syndrome at admission (odds ratio [95% confidence interval]-2.8 [1.8-6.6]), day 1 Sequential Organ Failure Assessment score (1.2 [1.0-1.3]), and the need for invasive ventilation (8.3 [3.4-20]) were the only independent predictors of unfavorable outcome. Conclusions: Dengue, scrub typhus, encephalitis, and malaria are the major tropical fevers in Indian ICUs. The data support a syndromic approach, point of care tests, and empiric antimicrobial therapy recommended by Indian Society of Critical Care Medicine in 2014.				
649.	Sivadasan, A., Muthusamy, K., Patel, B., Benjamin, R. N., Prabhakar, A. T., Mathew, V., Aaron, S. and Alexander, M. Clinical Spectrum, Therapeutic Outcomes, and Prognostic Predictors in Sjogren's Syndrome-associated Neuropathy Ann Indian Acad Neurol; 2017, 20 (3): 278-283 **Address:** Department of Neurological Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Pathology, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JUL TO DEC**	**NEUROLOGICAL SCIENCES, PATHOLOGY**	**PMID:**28904462 **PMCID:**5586125 **Impact Factor:** 0.950 **H-Index:** 17

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	OBJECTIVES: There are limited data regarding long-term follow-up and therapeutic outcomes in Sjogren's syndrome (SS)-associated peripheral neuropathy. In this study, we aim to study the clinical, electrophysiological spectrum and therapeutic responses among the different subtypes of SS-associated neuropathy. The predictors of suboptimal treatment response will be identified. METHODS: The study included a retrospective cohort of patients with SS-associated neuropathy between January 2012 and November 2015. Baseline clinical, laboratory, electrophysiological data and details of treatment were noted. Therapeutic outcomes were assessed at follow-up and compared among the different subtypes. Prognostic predictors were determined using logistic regression analysis. RESULTS: Fifty-four patients were included in the study. Sensory ataxic neuropathy (17, including 9 with sensory ganglionopathy) and radiculoneuropathy (11) were the main subtypes. Notable atypical presentations included acute neuropathies, pure motor neuropathies, and hypertrophic neuropathy. Concomitant autoimmune disorders were present in 24 (44.4%) patients. Most presentations were subacute-chronic (51, 94.4%). Minor salivary gland biopsy had a higher yield compared to serological markers (81.5 vs. 44.4%). Sensory ataxic neuropathy was associated with greater severity and autonomic dysfunction. Improvement was noted in 33 (61%) patients. Cranial neuropathy and radiculoneuropathy subtypes were associated with the best treatment responses. Chronicity, orthostatic hypotension, baseline severity, and marked axonopathy (nerve biopsy) were predictive of a suboptimal therapeutic response. CONCLUSIONS: The study highlights the heterogeneous spectrum, atypical presentations, and differential therapeutic responses. SS-associated neuropathy remains underdiagnosed. Early diagnosis and prompt initiation of immunotherapy before worsening axonal degeneration is paramount. SS-associated neuropathy need not necessarily be associated with a poor prognosis.				
650.	Sivaraju, L., Mani, S., Prabhu, K., Daniel, R. T. and Chacko, A. G. Three-dimensional computed tomography angiographic study of the vertebral artery in patients with congenital craniovertebral junction anomalies Eur Spine J; 2017, 26 (4): 1028-1038 **Address:** Department of Neurological Sciences, **Christian Medical College, Vellore,**	**INT**	**JAN TO JUN**	**NEUROLOGICAL SCIENCES, RADIOLOGY**	**PMID:**27137997 **Impact Factor:**2.563 **H-Index:** 105

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	India. laxminadh.sivaraju@gmail.com Department of Radiodiagnosis, **Christian Medical College, Vellore,** India. Department of Neurological Sciences, **Christian Medical College, Vellore,** India. **PURPOSE:** To describe vertebral artery (VA) course at the C0-C1-C2 complex in patients with congenital bony craniovertebral junction (CVJ) anomalies. **METHODS:** We studied the course of 169 VAs in 86 patients with congenital bony CVJ anomalies [basilar invagination (42), os odontoideum (33), and irreducible atlantoaxial dislocation (11)]. Occipitalized atlas occurred in 41 patients (30 complete and 11 partial). Using axial, coronal and sagittal three-dimensional computed tomography (3D-CT) angiograms, we traced the VA bilaterally at the CVJ and correlated the course to the presence or absence of occipitalization of the atlas. **RESULTS:** Of the 73 arteries associated with occipitalization of atlas, all had an abnormal course-58 (78.4 %) coursed through a canal within the C0-C1 fused complex and 15 (20.3 %) coursed below the C1 posterior arch, and it was absent unilaterally in one patient. There were 96 arteries associated with a non-occipitalized atlas and only 15 (15.3 %) were abnormal-eight coursed below the C1 posterior arch, four coursed above the C1 arch in the absence of a C1 foramen transversarium, one passed through a canal in C0-C1 and two arteries were absent unilaterally. Sixty vertebral arteries (34 on the right and 26 on the left side) had a redundant loop situated at a distance of >/=5 mm from the C1 lateral mass in patients with os odontoideum and irreducible atlantoaxial dislocation. **CONCLUSIONS:** In occipitalization of the atlas, the VA course is usually abnormal-typically passing through a canal within the C0-C1 fused complex or below the C1 arch. A redundant VA loop is more likely to be seen in os odontoideum and irreducible atlantoaxial dislocation. Careful study of the vertebral artery course with 3D CT angiography is mandatory while contemplating CVJ realignment surgery in congenital anomalies of the CVJ.				
651.	Sivaraju, L., Moorthy, R. K., Jeyaseelan, V. and Rajshekhar, V. Routine placement of subdural drain after burr hole evacuation of chronic and subacute subdural hematoma: a contrarian evidence based approach Neurosurg Rev; 2017, **Address:** Department of Neurological Sciences, **Christian Medical College, Vellore,** Tamilnadu, 632004, India. Department of Neurological Sciences, **Christian Medical**	**INT**	**JAN TO JUN**	**NEUROLOGICAL SCIENCES, BIOSTATISTICS**	**PMID:**28220367 **Impact Factor:** 2.060 **H-Index:** 49

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	College, Vellore, Tamilnadu, 632004, India. ranjith@cmcvellore.ac.in. Department of Biostatistics, **Christian Medical College, Vellore,** Tamilnadu, India. The objective of this paper was to evaluate whether available evidence supporting placement of subdural drain placement after evacuation of chronic subdural haematoma (CSDH) is applicable to a cohort of patients managed by us. In this observational cohort study, clinical follow-up was obtained in 166 patients who underwent burr hole evacuation of CSDH without placement of subdural drain followed by 3 days of bed rest. The primary outcome studied was recurrence requiring reoperation. Factors predicting recurrence were also analysed. We compared the patient characteristics and management protocols in our cohort with that in reports supporting drain placement to determine whether such evidence is relevant to our patient group. The mean age of our patients was 58 +/- 17 years (range, 1 to 89 years). Sixteen of the 166 (9.6%) patients presented with symptomatic recurrence. The median time to reoperation for recurrence (15 of 16 patients) after the primary procedure was 17 days (range, 2 to 68 days). Antiplatelet and anticoagulant therapy was the only factor that was significantly associated with recurrence (p = 0.01). There were no infective or non-infective complications in our patient cohort. Our patient cohort and outcomes differed from those reporting drain placements in the following parameters: they were a decade younger, all patients received bed rest for 3 days after surgery and the recurrence rate was similar to that reported in the drained groups but significantly less than that reported in the non-drained groups. Routine placement of drain following burr hole evacuation of CSDH should only be done after careful comparison of the patient cohort under consideration and those reporting superior outcomes with drains. Evidence-based medicine supports such an approach.				
652.	**SN Keshava**, S Kalva Interventional Radiology Training in India Journal of Clinical Interventional Radiology ISVIR. 1 (02), 067-067 **Author Affiliations:**Shyamkumar N. Keshava, Department of Radiology, **Christian Medical College, Vellore,** Tamil Nadu, India Sanjeeva KalvaDivision of Interventional Radiology, Department of Radiology, University of Texas Southwestern Medical Center, Dallas, TX, USA	**NAT**	**JAN TO JUN**	**RADIOLOGY**	**Not Indexed in PubMed**
653.	Soledad Retamozo1,2,3, Pilar Brito-Zerón3,4, Margit Zeher5, Kathy L. Sivils6, Raphaele Seror7, Thomas Mandl8, Xiaomei Li9, Chiara Baldini10, Jacques-Eric Gottenberg11, **Debashish Danda**12, Roberta Priori13, Luca Quartuccio14,	**INT**	**JUL TO DEC**	**CLINICAL IMMUNOLOGY AND**	**NO PMID WOS:**000411824101159

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Gabriela Hernandez-Molina15, Aike A. Kruize16, Seung-Ki Kwok17, Marie Wahren-Herlenius18, Sonja Praprotnik19, Damien Sene20, Roberto Gerli21, Roser Solans22, Yasunori Suzuki23, David A. Isenberg24, Maureen Rischmueller25, Gunnel Nordmark26, Guadalupe Fraile27, Piotr Wiland28, Hendrika Bootsma29, Takashi Nakamura30, Valeria Valim31, Roberto Giacomelli32, Valérie Devauchelle-Pensec33, Benedikt Hofauer34, Michele Bombardieri35, Virginia Fernandes Moça Trevisani36, Daniel S. Hammenfors37, Steven E. Carsons38, Sandra Gofinet Pasoto39, Jacques Morel40, Tamer Gheita41, Fabiola Atzeni42, Cristina F. Vollenweider43, Belchin Kostov44, Xavier Mariette45 and Manuel Ramos-Casals46, 1Rheumatology Unit, Hospital Privado Universitario de Córdoba, Institute University of Biomedical Sciences University of Córdoba (IUCBC), Cordoba, Argentina, 2Instituto de Investigaciones en Ciencias de la Salud, Universidad Nacional de Córdoba, Consejo Nacional de Investigaciones Científicas y Técnicas (INICSA-UNC-CONICET), Cordoba, Argentina, 3Laboratory of Systemic Autoimmune Diseases "Josep Font", CELLEX, Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Department of Systemic Autoimmune Diseases, ICMID, Hospital Clinic, Barcelona, Barcelona, Spain, 4Autoimmune Diseases Unit, Department of Medicine, Hospital CIMA- Sanitas, Barcelona., Bacelona, Spain, 5Division of Clinical Immunology, Faculty of Medicine, University of Debrecen, Debrecen, Hungary., Debrecen, Hungary, 6Arthritis and Clinical Immunology Program, Oklahoma Medical Research Foundation, Oklahoma City, OK, 7Center for Immunology of Viral Infections and Autoimmune Diseases, Assistance Publique – Hôpitaux de Paris, Hôpitaux Universitaires Paris-Sud, Le Kremlin-Bicêtre, Université Paris Sud, INSERM, Paris, France, Paris, France, 8Department of Rheumatology, Skåne University Hospital, Malmö, Sweden, Lund, Sweden, 9Department of Rheumatology and Immunology, Anhui Medical University Affiliated Provincial Hospital, China, Hefei, Anhui, China, 10Internal Medicine, Rheumatology Unit, University of Pisa, Pisa, Italy, 11Department of Rheumatology, Strasbourg University Hospital, Université de Strasbourg, CNRS, Strasbourg, France, Strasbourg, France, 12Clinical Immunology & Rheumatology, **Christian Medical College, Vellore,** India, Vellore, India, 13UO Complessa Reumatologia, Policlinico Umberto I Università Sapienza di Roma, Rome, Italy, 14Rheumatology Clinic, DSMB, University of Udine, Udine, Italy, Udine, Italy, 15Immunology and Rheumatology, Instituto Nacional de Ciencias Médicas y Nutrición SZ, mexico city, Mexico, 16Rheumatology & Clinical Immunology, University Medical Center Utrecht, Utrecht, Netherlands, 17seungki73@catholic.ac.kr, Division of Rheumatology, Department of Internal Medicine, College of Medicine, The Catholic University of			**RHEUMATOLOGY**	**Impact Factor:** NA **H-Index:** NA

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Korea, Seoul, Korea, Republic of (South), 18Unit of Experimental Rheumatology, Department of Medicine, Karolinska Institutet, Karolinska University Hospital, Stockholm, Sweden, Stockholm, Sweden, 19Department of Rheumatology, University Medical Centre Ljubljana, Ljubljana, Slovenia, 20Service de Médecine Interne 2, Hôpital Lariboisière, Université Paris VII, Assistance Publique-Hôpitaux de Paris, 2, Paris, France, Paris, France, 21University and Azienda Ospedaliera of Perugia, Perugia, Italy, 22Autoimmune Systemic Diseases Unit, Department of Internal Medicine, Hospital Vall d'Hebron, Autonomous University of Barcelona, Spain, Barcelona, Spain, 23Division of Rheumatology, Kanazawa University Graduate School of Medicine, Ishikawa, Japan, Kanazawa, Japan, 24Centre for Rheumatology Research, Division of Medicine, University College London, London, United Kingdom, 25Rheumatology, The Queen Elizabeth Hospital, South Australia, Adelaide, Australia, 26Department of Medical Sciences, Section of Rheumatology, Uppsala University, Uppsala, Sweden, Uppsala, Sweden, 27Autoimmune Diseases Department, Hospital Ramón y Cajal, Madrid, Spain, 28Department and Clinic of Rheumatology and Internal Medicine, Medical University, Wroclaw, Poland, 29Rheumatology and Clinical Immunology, University of Groningen, University Medical Center Groningen, Groningen, Netherlands, 30Department of Radiology and Cancer Biology, Nagasaki University School of Dentistry, Nagasaki, Japan, 31Rheumatology, Department of Medicine, Universidade Federal do Espírito Santo, Vitória, Brazil, Vitória, Brazil, 32University of L'Aquila, L'Aquila, Italy, 33Department of Rheumatology, Brest University Hospital, Brest, France, 34Hals-Nasen-Ohrenklinik und Poliklinik, Technische Universität München, München, Germany, München, Germany, 35Centre for Experimental Medicine and Rheumatology, William Harvey Research Institute, Queen Mary University of London, UK, London, United Kingdom, 36UNIFESP, Sao Paulo, Brazil, San Paulo, Brazil, 37Department of Rheumatology, Haukeland University Hospital, University of Bergen, Bergen, Norway, 38NYU Winthrop University Hospital, Department of Medicine, Mineola, NY, 39Internal Medicine, Division of Rheumatology - Faculdade de Medicina da Universidade de São Paulo, São Paulo, Brazil, São Paulo, Brazil, 40Department of Rheumatology, Teaching hospital and University of Montpellier, France, Montpellier, France, 41Rheumatology, Rheumatology Department, Faculty of Medicine, Cairo University, Egypt, Cairo, Egypt, 42Rheumatology Unit, ASST Fatebenefratelli - Sacco, L. Sacco University Hospital, Milano, Italy, 43Rheumatology, German Hospital, Buenos Aires, Argentina, Buenos Aires, Argentina, 44Primary Care Research Group, Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Primary Care Centre Les Corts, CAPSBE, Barcelona,				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Spain, 45Université Paris-Sud, AP-HP, Hôpitaux Universitaires Paris-Sud, Paris, France, 46Laboratory of Systemic Autoimmune Diseases "Josep Font", CELLEX, Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Department of Systemic Autoimmune Diseases, ICMID, Hospital Clinic, Barcelona, Spain, Barcelona, Spain Epidemiologic Subsets Drive a Differentiated Clinical and Immunological Presentation of Primary Sjögren Syndrome: Analysis of 9302 Patients from the Big Data International Sjögren Cohort [abstract]. Arthritis Rheumatol. 2017; 69 (suppl 10). http://acrabstracts.org/abstract/epidemiologic-subsets-drive-a-differentiated-clinical-and-immunological-presentation-of-primary-sjogren-syndrome-analysis-of-9302-patients-from-the-big-data-international-sjogren-cohort/ ABSTRACT NUMBER: 876; Meeting: 2017 ACR/ARHP Annual Meeting Date of first publication: September 18, 2017 Background/Purpose: To analyse whether epidemiologic factors (such as gender or age at diagnosis of the disease) are associated with particular disease expressions and define some specific subsets in patients with primary Sjögren syndrome (SS). Methods: The Big Data Sjögren project is an international, multicentre registry formed in 2014 to take a "high-definition" picture of the main features of primary SS at diagnosis by merging international SS databases using a Data-Sharing methodological approach. By January 2017, the database included 9302 consecutive patients recruited from 21 countries of the five continents. The main features at diagnosis (time of criteria fulfilment) or at recruitment were collected and analysed. Results: Of the 9032 patients, 8680 (93%) were women and 622 (7%) were men with a mean age at diagnosis of primary SS of 50 years; 76% were Caucasian. The frequency of fulfilment of the 2002 criteria was: 92% for dry eye, 93% for dry mouth, 88% for positive salivary gland biopsy, 93% for positive ocular tests, 85% for positive oral tests and 71% for positive Ro/La autoantibodies. Other immunological tests included positive ANA (81%), RF (49%), low C4 levels (13%), low C3 levels (14%) and cryoglobulins (7%). Men with primary SS presented a				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	higher frequency of White ethnicity (83% vs 76% in women, p < 0.001) and rheumatoid factor (54% vs 49%, p = 0.017), and a lower frequency of dry eyes (89% vs 92%, p = 0.011) and dry mouth (90% vs 94%, p = 0.026) in the multivariate model analysis. Patients with a younger onset (< 35 years) showed a lower frequency of White ethnicity (69% vs 77% in aged > 35 yrs, p < 0.001), dry eyes (86% vs 93%, p < 0.001) and positive ocular tests (81% vs 85%, p = 0.001), and a higher frequency of anti-Ro/La autoantibodies (84% vs 70%, p < 0.001), ANA (89% vs 80%, p < 0.001), RF (62% vs 47%, p < 0.001) and low C3 levels (19% vs 13%, p < 0.001) in the multivariate model analysis. Patients with an elderly onset (> 70 years) showed a higher frequency of White ethnicity (85% vs 75% in aged < 70 yrs, p < 0.001), positive oral tests (82% vs 76%, p = 0.003) and a lower frequency of anti-Ro/La autoantibodies (62% vs 72%, p < 0.001) and low C3 levels (9% vs 14%, p < 0.001) in the multivariate model analysis. Conclusion: In the largest reported cohort of primary SS patients diagnosed homogeneously around the world according to the 2002 AE criteria, we found that primary SS is a disease that can be presented heterogeneously at diagnosis, depending on specific epidemiologic features such as gender, age and ethnicity. Keywords: Big data, epidemiologic methods and race/ethnicity, Sjogren's syndrome				
654.	Sonbare, D. J. Organ Failure and Infection in Necrotizing Pancreatitis: What Are the Predictors of Mortality? Ann Surg; 2017, **Address: Christian Medical College and Hospital** Vellore, Tamil Nadu, India.	**INT**	**JAN TO JUN**	**SURGERY**	**PMID:**28257322 **Impact Factor:** 8.980 **H-Index:** 264
655.	Soriano, Joan B., Abajobir, Amanuel Alemu, Abate, Kalkidan Hassen, Abera, Semaw Ferede, Agrawal, Anurag, Ahmed, Muktar Beshir, Aichour, Amani Nidhal, Aichour, Ibtihel, Aichour, Miloud Taki Eddine, Alam, Khurshid, Alam, Noore, Alkaabi, Juma M., Al-Maskari, Fatma, Alvis-Guzman, Nelson, Amberbir, Alemayehu, Amoako, Yaw Ampem, Ansha, Mustafa Geleto, Anto, Josep M., Asayesh, Hamid, Atey, Tesfay Mehari, Avokpaho, Euripide Frinel G. Arthur, Barac, Aleksandra, Basu, Sanjay, Bedi, Neeraj, Bensenor, Isabela M., Berhane, Adugnaw, Beyene, Addisu Shunu, Bhutta, Zulfiqar A., Biryukov, Stan, Boneya, Dube Jara, Brauer, Michael, Carpenter, David O., Casey, Daniel, **Christopher, Devasahayam Jesudas,**	**INT**	**JUL TO DEC**	**PULMONARY MEDICINE**	**PMID:**28822787 **PMCID:PMC**5573769 WOS:000408367900018 **Impact Factor:** 19.287 **H-Index:** 53

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Dandona, Lalit, Dandona, Rakhi, Dharmaratne, Samath D., Huyen Phuc, Do, Fischer, Florian, Geleto, Ayele, Ghoshal, Aloke Gopal, Gillum, Richard F., Ginawi, Ibrahim Abdelmageem Mohamed, Gupta, Vipin, Hay, Simon I., Hedayati, Mohammad T., Horita, Nobuyuki, Hosgood, H. Dean, Jakovljevic, Mihajlo B., James, Spencer Lewis, Jonas, Jost B., Kasaeian, Amir, Khader, Yousef Saleh, Khalil, Ibrahim A., Khan, Ejaz Ahmad, Khang, Young-Ho, Khubchandani, Jagdish, Knibbs, Luke D., Kosen, Soewarta, Koul, Parvaiz A., Kumar, G. Anil, Leshargie, Cheru Tesema, Liang, Xiaofeng, Abd El Razek, Hassan Magdy, Majeed, Azeem, Malta, Deborah Carvalho, Manhertz, Treh, Marquez, Neal, Mehari, Alem, Mensah, George A., Miller, Ted R., Mohammad, Karzan Abdulmuhsin, Mohammed, Kedir Endris, Mohammed, Shafiu, Mokdad, Ali H., Naghavi, Mohsen, Cuong Tat, Nguyen, Nguyen, Grant, Quyen Le, Nguyen, Trang Huyen, Nguyen, Ningrum, Dina Nur Anggraini, Vuong Minh, Nong, Obi, Jennifer Ifeoma, Odeyemi, Yewande E., Ogbo, Felix Akpojene, Oren, Eyal, Mahesh, P. A., Park, Eun-Kee, Patton, George C., Paulson, Katherine, Qorbani, Mostafa, Quansah, Reginald, Rafay, Anwar, Rahman, Mohammad Hifz Ur, Rai, Rajesh Kumar, Rawaf, Salman, Reinig, Nik, Safiri, Saeid, Sarmiento-Suarez, Rodrigo, Sartorius, Benn, Savic, Miloje, Sawhney, Monika, Shigematsu, Mika, Smith, Mari, Tadese, Fentaw, Thurston, George D., Topor-Madry, Roman, Tran, Bach Xuan, Ukwaja, Kingsley Nnanna, Van Boven, Job F. M., Vlassov, Vasiliy Victorovich, Vollset, Stein Emil, Wan, Xia, Werdecker, Andrea, Hanson, Sarah Wulf, Yano, Yuichiro, Yimam, Hassen Hamid, Yonemoto, Naohiro, Yu, Chuanhua, Zaidi, Zoubida, Zaki, Maysaa El Sayed, Murray, Christopher J. L., Vos, Theo and Collabor, G. B. D. Chronic Resp Dis Global, regional, and national deaths, prevalence, disability-adjusted life years, and years lived with disability for chronic obstructive pulmonary disease and asthma, 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015 Lancet Respir Med. 2017 Sep;5(9):691-706. doi: 10.1016/S2213-2600(17)30293-X. Epub 2017 Aug 16. **GBD 2015 Chronic Respiratory Disease Collaborators.** Background Chronic obstructive pulmonary disease (COPD) and asthma are common diseases with a heterogeneous distribution worldwide. Here, we present				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	methods and disease and risk estimates for COPD and asthma from the Global Burden of Diseases, Injuries, and Risk Factors (GBD) 2015 study. The GBD study provides annual updates on estimates of deaths, prevalence, and disability-adjusted life years (DALYs), a summary measure of fatal and non-fatal disease outcomes, for over 300 diseases and injuries, for 188 countries from 1990 to the most recent year. Methods We estimated numbers of deaths due to COPD and asthma using the GBD Cause of Death Ensemble modelling (CODEm) tool. First, we analysed data from vital registration and verbal autopsy for the aggregate category of all chronic respiratory diseases. Subsequently, models were run for asthma and COPD relying on covariates to predict rates in countries that have incomplete or no vital registration data. Disease estimates for COPD and asthma were based on systematic reviews of published papers, unpublished reports, surveys, and health service encounter data from the USA. We used the Global Initiative of Chronic Obstructive Lung Disease spirometry-based definition as the reference for COPD and a reported diagnosis of asthma with current wheeze as the definition of asthma. We used a Bayesian meta-regression tool, DisMod-MR 2.1, to derive estimates of prevalence and incidence. We estimated population-attributable fractions for risk factors for COPD and asthma from exposure data, relative risks, and a theoretical minimum exposure level. Results were stratified by Socio-demographic Index (SDI), a composite measure of income per capita, mean years of education over the age of 15 years, and total fertility rate. Findings In 2015, 3.2 million people (95% uncertainty interval [UI] 3.1 million to 3.3 million) died from COPD worldwide, an increase of 11.6% (95% UI 5.3 to 19.8) compared with 1990. There was a decrease in age-standardised death rate of 41.9% (37.7 to 45.1) but this was counteracted by population growth and ageing of the global population. From 1990 to 2015, the prevalence of COPD increased by 44.2% (41.7 to 46.6), whereas age-standardised prevalence decreased by 14.7% (13.5 to 15.9). In 2015, 0.40 million people (0.36 million to 0.44 million) died from asthma, a decrease of 26.7% (-7.2 to 43.7) from 1990, and the age-standardised death rate decreased by 58.8% (39.0 to 69.0). The prevalence of asthma increased by 12.6% (9.0 to 16.4), whereas the age-standardised prevalence decreased by 17.7% (15.1 to 19.9). Age-standardised DALY rates due to COPD increased until the middle range of the SDI before reducing sharply. Age-standardised DALY rates due to asthma in both sexes decreased monotonically with rising SDI. The relation between with SDI and DALY rates due to asthma was attributed to variation in years of life lost (YLLs), whereas DALY rates due to COPD varied similarly for YLLs and years lived with disability across the SDI continuum. Smoking and ambient				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	particulate matter were the main risk factors for COPD followed by household air pollution, occupational particulates, ozone, and secondhand smoke. Together, these risks explained 73.3% (95% UI 65.8 to 80.1) of DALYs due to COPD. Smoking and occupational asthmagens were the only risks quantified for asthma in GBD, accounting for 16.5% (14.6 to 18.7) of DALYs due to asthma. Interpretation Asthma was the most prevalent chronic respiratory disease worldwide in 2015, with twice the number of cases of COPD. Deaths from COPD were eight times more common than deaths from asthma. In 2015, COPD caused 2.6% of global DALYs and asthma 1.1% of global DALYs. Although there are laudable international collaborative efforts to make surveys of asthma and COPD more comparable, no consensus exists on case definitions and how to measure disease severity for population health measurements like GBD. Comparisons between countries and over time are important, as much of the chronic respiratory burden is either preventable or treatable with affordable interventions. Copyright (C) The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY 4.0 license. DOI: 10.1016/S2213-2600(17)30293-X				
656.	Srinidhi, B. V., Fletcher, G. J., Sachidanantham, J., Rupali, P., Ramalingam, V. V., Demosthenes, J. P., Abraham, O. C., Pulimood, S. A., Rebekah, G. and Kannangai, R. Effect of Interleukin-28B polymorphism on Interleukin-28 expression and immunological recovery amongst HIV-1-infected individuals following antiretroviral therapy Indian J Med Microbiol; 2017, 35 (4): 580-584 **Address:** Department of Clinical Virology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Medicine and Infectious Diseases, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Dermatology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India. PURPOSE: Type III interferon is well known to have diverse antiviral and immunomodulatory activities. Studies describing the association of interleukin (IL)-28 polymorphisms in treatment-experienced HIV participants are limited. This study was aimed to determine the association of IL-28B gene polymorphisms with immunological recovery in HIV patients on 6-9 months of antiretroviral therapy (ART). METHODS: Eighty treatment-naive HIV patients were recruited, of which 48	**NAT**	**JUL TO DEC**	**CLINICAL VIROLOGY, MEDICINE AND INFECTIOUS DISEASES, DERMATOLOGY, BIOSTATISTICS**	**PMID:**29405153 **Impact Factor:** 1.149 **H-Index:**38

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	patients were followed up after 6-9 months of ART. Whole blood samples were collected before and after 6-9 months of ART. CD4, CD8 and CD3 counts were enumerated flow cytometry. IL-28B polymorphisms (rs12979860 and rs8099917) were profiled by polymerase chain reaction (PCR)-restriction fragment length polymorphism. The IL-28 mRNA and plasma HIV-1 viral load were estimated using real-time PCR and plasma IL-28 level by ELISA. RESULTS: The CD4, CD4/CD3%, IL-28 mRNA and reversal of CD4/CD8 ratio were significantly increased following 6-9 months of ART ($P < 0.01$). The rs12979860 CC genotype and rs12979860:rs8099917 (CC: TT) haplotype showed significant association with higher CD4+ T-cell count amongst treatment-naive HIV-infected individuals ($P < 0.05$). In addition, there was a significant association of rs12979860 CC genotype with increase in CD4/CD3% following 6-9 months of ART. IL-28 mRNA showed correlation with the HIV-1 viral load, and there was a significant increase in the IL-28 mRNA expression following 6-9 months of ART. CONCLUSION: Our preliminary findings suggest that IL-28 polymorphisms could influence both immunological recovery and therapeutic response in HIV infection. Hence, functional studies are warranted to understand the mechanistic basis of IL-28-mediated host genetic influence on HIV therapeutic response. P				
657.	Srinivasan, N. K., John, D., Rebekah, G., Kujur, E. S., Paul, P. and John, S. S. Diabetes and Diabetic Retinopathy: Knowledge, Attitude, Practice (KAP) among Diabetic Patients in A Tertiary Eye Care Centre J Clin Diagn Res; 2017, 11 (7): NC01-NC07 **Address:** PG Registrar, Department of Ophthalmology, **Christian Medical College, Vellore,** Tamil Nadu, India. Associate Professor, Department of Ophthalmology, **Christian Medical College, Vellore,** Tamil Nadu, India. Lecturer, Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India. Tutor, School of Optometry, Department of Ophthalmology, **Christian Medical College, Vellore,** Tamil Nadu, India. Professor, Department of Ophthalmology, **Christian Medical College, Vellore,** Tamil Nadu, India. INTRODUCTION: Diabetic retinopathy is becoming an increasingly important cause	**NAT**	**JUL TO DEC**	**OPHTHALMOLOGY, BIOSTATISTICS**	**PMID:**28892947 **PMCID:**5583928 **Impact Factor:** 0.650 **H-Index:** 18

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	of visual impairment in India. Many diabetic patients who come to our centre have undetected, advanced diabetic retinopathy. If diabetic retinopathy had been detected earlier in these patients, irreversible visual impairment could have been prevented. AIM: To document Knowledge, Attitude and Practice (KAP) patterns of diabetic patients regarding diabetes and diabetic retinopathy, to determine association between them, and to identify barriers to compliance with follow up and treatment regimes. MATERIALS AND METHODS: This was a hospital-based, cross-sectional study, conducted at the Department of Ophthalmology at **Christian Medical College, Vellore,** Tamil Nadu, India, over a six-month period from June 2013 to November 2013. Two hundred and eighty eight diabetic patients, who fulfilled the eligibility criteria, were included in the study. KAP of patients was assessed using a 45-point, verbally administered questionnaire. Patients were placed in different categories, such as, 'good/ poor' knowledge, 'positive/negative' attitude and 'good/poor' practice. Data were analysed using Chi-square test and binary logistic regression, as appropriate. The proportion of patients with 'good/poor' knowledge, 'positive/negative' attitude and 'good/poor' practice, and the association between KAP were studied. Barriers to compliance with follow up/treatment regimes were identified. RESULTS: Out of the 288 patients in the study, 42% had good knowledge about diabetes, but only 4.5% had good knowledge about retinopathy. Good knowledge about diabetes was significantly associated with positive attitude towards diabetes and good practice patterns regarding retinopathy; awareness of retinopathy was also significantly associated with good practice. A total of 61.1% of patients did not have periodic eye examination; most common barrier identified was lack of awareness about the necessity for this (38.5%). CONCLUSION: Good knowledge about the disease was significantly associated with positive attitude and good practice patterns. Knowledge about diabetic retinopathy was poor among the patients in our study. Lack of awareness concerning the need for screening for retinopathy was a major barrier to regular screening. There is an urgent need to educate diabetic patients about this potentially blinding complication of diabetes.				
658.	Srinivasan, R., Girish Kumar, C. P., Naaraayan, S. A., Jehangir, S., Thangaraj, J. W. V., Venkatasubramanian, S. and Kang, G. Intussusception hospitalizations before rotavirus vaccine introduction: Retrospective data from two referral hospitals in Tamil Nadu, India Vaccine; 2017, **Address:** Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,**	**INT**	**JUL TO DEC**	**PAEDIATRIC SURGERY, WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**29199044 **Impact Factor:** 3.235 **H-Index:** 151

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	India. ICMR - National Institute of Epidemiology, Chennai, India. Institute of Child Health and Hospital for Children, Chennai, India. Department of Pediatric Surgery, **Christian Medical College, Vellore,** India. Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** India. Electronic address: gkang@cmcvellore.ac.in. BACKGROUND: The indigenous oral rotavirus vaccine Rotavac(R) was introduced into the public immunization system in India in 2016 and will be expanded in phases. This data will describe the epidemiology of intussusception in India in absence of rotavirus vaccination and will help in setting up or designing a safety monitoring system. METHODS: Medical records of intussusception cases between 2013 and 2016 in two major referral hospitals in Tamil Nadu, India were reviewed, and data on clinical presentation and management and outcome were collated. RESULTS: A total of 284 cases of intussusception were diagnosed and managed at the two centers of which 280/284 could be classified as level 1 by the Brighton criteria. Median age at presentation was 8months (Inter Quartile Range, IQR 6-17.2) with a male to female ratio of 2.1:1. Over half (57.7%) required surgical intervention while the rest underwent non-surgical or conservative management. CONCLUSIONS: Retrospective data from referral hospitals is sufficient to classify cases of intussusception by the Brighton criteria. These baseline data will be useful for monitoring when rotavirus vaccination is introduced.			**, GASTROINTESTINAL SCIENCES,**	
659.	Srinivasan, R., Mohan, V. R., Venugopal, S. and Kang, G. Utilization of Preventive and Curative Services in Five Rural Blocks of a Southern Indian District Indian Pediatrics; 2017, 54 (9): 777-778 **Address:** Division of Gastrointestinal Sciences and * Community Health, **Christian Medical College, Vellore,** India. Email: venkat@cmcvellore.ac.in	**NAT**	**JAN TO JUN**	**GASTROINTESTINAL SCIENCES, COMMUNITY HEALTH**	**PMID:**28607216 **Impact Factor:** 1.152 **H-Index:** 41
660.	Srivastava, A. and Shaji, R. V. Cure for thalassemia major - from allogeneic hematopoietic stem cell transplantation to gene therapy Haematologica; 2017, 102 (2): 214-223	**INT**	**JAN TO JUN**	**HAEMATOLOGY, CENTRE FOR STEM CELL RESEARCH**	**PMID:**27909215 **Impact Factor:** 7.702 **H-Index:** 114

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Department of Haematology & Centre for Stem Cell Research (a unit of inStem, Bengaluru), **Christian Medical College, Vellore**- 632004, Tamil Nadu, India aloks@cmcvellore.ac.in Department of Haematology & Centre for Stem Cell Research (a unit of in Stem, Bengaluru), **Christian Medical College, Vellore**-632004, Tamil Nadu, India. Allogeneic hematopoietic stem cell transplantation has been well established for several decades as gene replacement therapy for patients with thalassemia major, and now offers very high rates of cure for patients who have access to this therapy. Outcomes have improved tremendously over the last decade, even in high-risk patients. The limited data available suggests that the long-term outcome is also excellent, with a >90% survival rate, but for the best results, hematopoietic stem cell transplantation should be offered early, before any end organ damage occurs. However, access to this therapy is limited in more than half the patients by the lack of suitable donors. Inadequate hematopoietic stem cell transplantation services and the high cost of therapy are other reasons for this limited access, particularly in those parts of the world which have a high prevalence of this condition. As a result, fewer than 10% of eligible patients are actually able to avail of this therapy. Other options for curative therapies are therefore needed. Recently, gene correction of autologous hematopoietic stem cells has been successfully established using lentiviral vectors, and several clinical trials have been initiated. A gene editing approach to correct the beta-globin mutation or disrupt the BCL11A gene to increase fetal hemoglobin production has also been reported, and is expected to be introduced in clinical trials soon. Curative possibilities for the major hemoglobin disorders are expanding. Providing access to these therapies around the world will remain a challenge.				
661.	Srivastava, A., Serban, M., Werner, S., Schwartz, B. A. and Kessler, C. M. Efficacy and safety of a VWF/FVIII concentrate (wilate(R)) in inherited von Willebrand disease patients undergoing surgical procedures Haemophilia; 2017, 23 (2): 264-272 **Address:** Department of Haematology, **Christian Medical College, Vellore,** India. University Emergency Pediatric Hospital Louis Turcanu, Timisoara, Romania. Octapharma Clinical Research, Hoboken, NJ, USA. Hemophilia and Thrombosis	**INT**	**JAN TO JUN**	**HAEMATOLOGY**	**PMID:**28026130 **Impact Factor:** 3.569 **H-Index:** 79

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Comprehensive Treatment Center and the Division of Coagulation, Georgetown University Medical Center, Washington, DC, USA. **INTRODUCTION:** Surgical procedures in von Willebrand disease (VWD) patients may require prophylactic treatment with exogenous von Willebrand factor (VWF) and coagulation factor VIII (FVIII) to prevent excessive bleeding. Wilate(R) is a plasma-derived, double virus-inactivated, highly purified, freeze-dried VWF/FVIII concentrate, containing both factors in a physiological activity ratio of 1:1. **AIM:** To investigate the efficacy and safety of wilate(R) in maintaining haemostasis in VWD patients undergoing surgical procedures. **METHODS:** This prospective, open-label multinational clinical study documents 28 individuals who underwent 30 surgical procedures managed with wilate(R). Twenty-one patients had VWD Type 3, and 21 surgeries were major. Efficacy was assessed intra- and postoperatively by the surgeon and investigator, respectively, and adjudicated by an Independent Data Monitoring Committee, using an objective scale based on blood loss, transfusion requirements and postoperative bleeding and oozing. Treatment success (primary endpoint) was determined using a composite assessment algorithm and was formally assessed. **RESULTS:** Surgical prophylaxis with wilate(R) was successful in 29 of 30 procedures. The overall rate of success was 96.7% (98.75% CI: 0.784, 1.000). All 21 surgeries in patients with VWD Type 3 were managed successfully. There was no accumulation of VWF or FVIII after multiple dosing, and no thromboembolic events or inhibitors to VWF or FVIII were observed. **CONCLUSIONS:** Wilate(R) demonstrated effective prevention and treatment of bleeding in inherited VWD patients undergoing surgery, with no clinically significant safety concerns.				
662.	Srivastava, Vivi Miriam, Arunachal, Gautham, Pandurang, Pujari Ganesh, Yuvarani, S. and Danda, Sumita Clonal chromosomal abnormalities in ataxia telangiectasia Molecular Cytogenetics; 2017, 10	**INT**	**JUL TO DEC**	**CLINICAL GENETICS**	**NO PMID** **WOS:**000410864800100 **Impact Factor:**1.455 **H-Index:** 21
663.	Subashini, B., Adhikari, D. D., Verghese, V. P., Jeyaseelan, V., Veeraraghavan, B. and Prakash, J. A. CNS Infections in Children: Experience from a Tertiary Care Center	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY, PAEDIATRICS,**	**PMID:**28250626 **Impact Factor:** 0.820 **H-Index:** 16

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	J Glob Infect Dis; 2017, 9 (1): 35-36 **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Paediatrics, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Biostatistics, **Christian Medical College, Vellore,** Tamil Nadu, India.			**BIOSTATISTICS**	
664.	Sudarsanam, T. D., Rupali, P., Tharyan, P., Abraham, O. C. and Thomas, K. Pre-admission antibiotics for suspected cases of meningococcal disease Cochrane Database Syst Rev; 2017, 6 CD005437 **Address:** Medicine Unit 2 and Clinical Epidemiology Unit, **Christian Medical College,** Ida Scudder Road, Vellore, Tamil Nadu, India, 632 004. **BACKGROUND:** Meningococcal disease can lead to death or disability within hours after onset. Pre-admission antibiotics aim to reduce the risk of serious disease and death by preventing delays in starting therapy before confirmation of the diagnosis. **OBJECTIVES:** To study the effectiveness and safety of pre-admission antibiotics versus no pre-admission antibiotics or placebo, and different pre-admission antibiotic regimens in decreasing mortality, clinical failure, and morbidity in people suspected of meningococcal disease. SEARCH **METHODS:** We searched CENTRAL (6 January 2017), MEDLINE (1966 to 6 January 2017), Embase (1980 to 6 January 2017), Web of Science (1985 to 6 January 2017), LILACS (1982 to 6 January 2017), and prospective trial registries to January 2017. We previously searched CAB Abstracts from 1985 to June 2015, but did not update this search in January 2017. SELECTION CRITERIA: Randomised controlled trials (RCTs) or quasi-RCTs comparing antibiotics versus placebo or no intervention, in people with suspected meningococcal infection, or different antibiotics administered before admission to hospital or confirmation of the diagnosis. **DATA COLLECTION AND ANALYSIS:** Two review authors independently assessed trial quality and extracted data from the search results. We calculated the risk ratio (RR) and 95% confidence interval (CI) for dichotomous data. We included only one trial and so did not perform data synthesis. We assessed the overall quality of the evidence using the GRADE approach. **MAIN RESULTS:** We found no RCTs comparing pre-admission antibiotics versus no pre-admission antibiotics or placebo. We included one open-label, non-inferiority RCT with 510 participants, conducted during an epidemic in	**INT**	**JAN TO JUN**	**MEDICINE UNIT 2 AND CLINICAL EPIDEMIOLOGY UNIT**	**PMID:**28613408 **Impact Factor:** 6.124 **H-Index:** 189

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Niger, evaluating a single dose of intramuscular ceftriaxone versus a single dose of intramuscular long-acting (oily) chloramphenicol. Ceftriaxone was not inferior to chloramphenicol in reducing mortality (RR 1.21, 95% CI 0.57 to 2.56; N = 503; 308 confirmed meningococcal meningitis; 26 deaths; moderate-quality evidence), clinical failures (RR 0.83, 95% CI 0.32 to 2.15; N = 477; 18 clinical failures; moderate-quality evidence), or neurological sequelae (RR 1.29, 95% CI 0.63 to 2.62; N = 477; 29 with sequelae; low-quality evidence). No adverse effects of treatment were reported. Estimated treatment costs were similar. No data were available on disease burden due to sequelae. AUTHORS' **CONCLUSIONS:** We found no reliable evidence to support the use pre-admission antibiotics for suspected cases of non-severe meningococcal disease. Moderate-quality evidence from one RCT indicated that single intramuscular injections of ceftriaxone and long-acting chloramphenicol were equally effective, safe, and economical in reducing serious outcomes. The choice between these antibiotics should be based on affordability, availability, and patterns of antibiotic resistance.Further RCTs comparing different pre-admission antibiotics, accompanied by intensive supportive measures, are ethically justified in people with less severe illness, and are needed to provide reliable evidence in different clinical settings.				
665.	Sudhakar, P., Jose, J. and George, O. K. Contemporary outcomes of percutaneous closure of patent ductus arteriosus in adolescents and adults Indian Heart Journal; 2017, https://doi.org/10.1016/j.ihj.2017.08.001 **Address:** Department of Cardiology, **Christian Medical College Hospital, Vellore,** India Background: Catheter based treatment has gained wide acceptance for management of patent ductus arteriosus(PDA) ever since its introduction. Percutaneous closure in adults can be challenging because of anatomical factors including large sizes, associated pulmonary arterial hypertension(PAH) and co-morbidities. This study aimed to provide comprehensive contemporary data on the safety and efficacy of percutaneous device closure of PDA in adult and adolescent population at a large referral center. Methods: This single-center retrospective analysis included70 patients (33adolescents and 37adults) who underwent successful percutaneous device closure of PDA between January 2011 and February 2017.Baseline patient demographics, clinical characteristics, procedural and device related variables, and immediate outcomes during hospital stay were recorded.	**NAT**	**JUL TO DEC**	**CARDIOLOGY**	**NO PMID** **NO PMCID** **SCOPUS** **Impact Factor:**0.610 **H-Index:** 32

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Patients were followed-up for residual shunt and complications. Results: Of 70 PDA device closure cases, 71.4% were females; the mean age was 23years(range:10-58years). Devices used were 4-Cook's detachable coils, 64-occluders (ADO-I and II, Lifetech, Cardi-O-Fix), 1-vascular plug and 1-ventricular septal occluder device. Device success was achieved in all including those with very large PDAs.At 24-h post-procedure, the success rate of transcatheter intervention was 95.7%. At 6-months follow-up, complete closure was observed in all (mean follow-up duration-531. days). In patients with severe PAH, significant immediate and sustained reduction of the mean pulmonary pressure was observed(77. mmHg to 33. mmHg;P = 0.014). No procedure-related complications including death, device embolization and stenosis of aorta or pulmonary artery occurred. Conclusions: In contemporary practice, percutaneous device closure is an effective and safe treatment option for adolescent and adult PDA patients. © 2017.				
666.	Sudheesh, S. and Boaz, R. J. Degrees of Deficiency: Doctors and Vitamin D Indian J Community Med; 2017, 42 (1): 53 **Address:** Department of Community Medicine, Christian Fellowship Hospital, Orissa, India.☐Department of Urology, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JAN TO JUN**	**UROLOGY**	**PMID:**28331255 **Impact Factor:** 1.220 **H-Index:** 20
667.	Suganthy Rabi, Inbam Indrasingh et al. ollicular dendritic cells in normal and infected human appendix Eur. J. Anat.; 2017, 21 31-35 **Address:** Department of Anatomy, **Christian Medical College, Vellore,** Tamilnadu, India Follicular dendritic cells (FDCs) that reside within the lymphoid follicles play a central role in humoral immunity. They bind immune complexes and present antigen to follicular B cells and in the generation of B cell memory. This study aims to demonstrate the distribution of CD35 positive FDCs in normal and infected appendix by immunohistochemistry. Four normal and 5 infected appendix specimens were used for the study. Tissues collected were processed for immunohistochemistry, stained with mouse antihuman CD35 monoclonal antibody	**INT**	**JUL TO DEC**	**ANATOMY**	**Indexed in PubMed**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	using the Polymer – HRP Detection System. Double immunostaining was done with mouse antihuman CD20 monoclonal antibody to find out the association CD35 positive Langerhans cells with B lymphocytes. Cells were viewed under the light microscope (Olympus DP21). In the normal appendix, CD35 positive FDCs were present in a reticular pattern in the germinal centre of the follicle. In acute appendicitis, the lymphatic follicles were not intact and FDCs were scattered in the mucosa of the appendix. Few discrete CD35 positive cells were seen surrounding the intestinal glands. CD20 positive B lymphocytes were noted in the lymphatic follicle, interfollicular areas, around the crypts and in the lamina propria. Apposition of CD35 and CD20 cells was noted. The dendrites of FDCs demonstrated in the follicles of appendix displayed an antigen-retaining reticulum which aids in trapping of immune complexes. Their association with CD20 positive B cells confirm the role of appendix in humoral immunity. PMC				
668.	Sumitha Mary Jacob. Dr., Satheesh Solomon T Selvin. Dr., Padma Paul. Dr., Anika Amritanand. Dr. and Pushpa Jacob. Dr. Knowledge and Practice of Contact Lens use among young wearers International Journal of Current Research Vol. 9, Issue, 03, pp.47545-47549, March, 2017 **Address:** Christian Medical College (CMC), Vellore, Tamilnadu, India Aim: To assess the knowledge and practice of contact lens (CL) use among the young current users using a piloted questionnaire. Materials and Methods: An observational study was conducted between July and August 2013 in two colleges among young, current CL wearers undergoing various professional courses. Results: A total of 122 current CL users between 18-23 years were evaluated of which 67.2% were females. About 79.5% of the students were using soft CL of which 44.3% were disposable CL users. The participants preferred CL because they looked better (45.9%), improved their self confidence (30.3%) or felt more comfortable (30.3%) as compared to spectacles. About 37.7% of the students had the habit of sleeping with their CL on. CL were being cleaned regularly on removal by 73% while 5.7% were cleaning it only occasionally. Multipurpose solution was used for rinsing the lenses by 59% of the students. About 62.3% of contact lens users had problems/complications related to lens usage and the most frequent complications were general discomfort (26.2%), dryness (22.1%) and itching of eyes (17.2%). Only 61.8% of those who had complications consulted an Ophthalmologist. Statistical analysis used: Cross tab analysis using Fisher's exact test to assess various correlations and categorical variables using frequencies and	**NAT**	**JAN TO JUN**	**OPHTHALMOLOGY**	**Indexed in Index Copernicus**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	percentages. Conclusion: About 26.6 to 45.1% of young CL users do not follow the recommended lens care and hygiene practices. CL education on wear and care is of paramount importance and a regular follow up with an Ophthalmologist is mandatory.				
669.	Sundaram, B., Cherian, A. G. and Kumar, S. 3D Decellularized Native Extracellular Matrix Scaffold for In Vitro Culture Expansion of Human Wharton's Jelly-Derived Mesenchymal Stem Cells (hWJ MSCs) Methods Mol Biol; 2017, **Address:** Center for Stem Cell Research, A Unit of inStem Bengaluru, **Christian Medical College,** CMC Rehab Campus Bagayam, Vellore, Tamil Nadu, 632002, India. Department of Obstetrics and Gynaecology, **Christian Medical College vellore** Hospital, Vellore, Tamil Nadu, 632002, India. Department of Community Health, **Christian Medical College vellore** Hospital, Vellore, Tamil Nadu, 632002, India. Center for Stem Cell Research, A Unit of inStem Bengaluru, **Christian Medical College,** CMC Rehab Campus Bagayam, Vellore, Tamil Nadu, 632002, India. skumar@cmcvellore.ac.in. Mesenchymal stem cells (MSCs) are derived from Wharton's jelly tissue of the human umbilical cord. Given appropriate culture conditions, these cells can self-renew and differentiate into multiple cell types across the lineages. Among the properties exhibited by these cells, immunomodulation through secretion of trophic factors has been widely exploited in a broad spectrum of preclinical/clinical regenerative applications. Moreover, the extracellular matrix is found to play a major role apart from niche cells in determining stem cell fate including that of MSCs. Therefore, the currently employed technique of two-dimensional culture expansion can alter the inherent properties of naive MSCs originally residing within the three-dimensional space. This limitation can be overcome to some extent by using native extracellular matrix scaffold culture system which mimics the in situ microenvironment. In this chapter, we have elucidated the protocol for the preparation of a native extracellular matrix scaffold by decellularization of the MSC sheet and thereof culture expansion and characterization of human Wharton's jelly-derived MSCs.	**INT**	**JUL TO DEC**	**CENTER FOR STEM CELL RESEARCH**	**PMID:**28963712 **Impact Factor:** 0.790 **H-Index:** 104
670.	Sunkara, S. K., Antonisamy, B., Selliah, H. Y. and Kamath, M. S. Pre-term birth and low birth weight following preimplantation genetic diagnosis:	**INT**	**JAN TO JUN**	**REPRODUCTIVE MEDICINE UNIT**	**PMID:**27979918 **Impact Factor:** 5.020

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	analysis of 88 010 singleton live births following PGD and IVF cycles Hum Reprod; 2017, 32 (2): 432-438 **Address:** Queen's Hospital, Barking Havering Redbridge University Hospitals NHS Trust, Essex, UK sksunkara@hotmail.com Sesh.sunkara1@nhs.net**Christian Medical College Hospital, Vellore,** Tamil Nadu, India. STUDY QUESTION: Is PGD associated with the risk of adverse perinatal outcomes such as pre-term birth (PTB) and low birth weight (LBW)? SUMMARY ANSWER: There was no increase in the risk of adverse perinatal outcomes of PTB, and LBW following PGD compared with autologous IVF. WHAT IS KNOWN ALREADY: Pregnancies resulting from ART are associated with a higher risk of pregnancy complications compared with spontaneously conceived pregnancies. The possible reason of adverse obstetric outcomes following ART has been attributed to the underlying infertility itself and embryo specific epigenetic modifications due to the IVF techniques. It is of interest whether interventions such as embryo biopsy as performed in PGD affect perinatal outcomes. STUDY DESIGN, SIZE, DURATION: Anonymous data were obtained from the Human Fertilization and Embryology Authority (HFEA), the statutory regulator of ART in the UK. The HFEA has collected data prospectively on all ART performed in the UK since 1991. Data from 1996 to 2011 involving a total of 88 010 singleton live births were analysed including 87 571 following autologous stimulated IVF +/- ICSI and 439 following PGD cycles. PARTICIPANTS/MATERIALS, SETTING, **METHODS:** Data on all women undergoing either a stimulated fresh IVF +/- ICSI treatment cycle or a PGD cycle during the period from 1996 to 2011 were analysed to compare perinatal outcomes of PTB and LBW among singleton live births. Logistic regression analysis was performed adjusting for female age category, year of treatment, previous IVF cycles, infertility diagnosis, number of oocytes retrieved, whether IVF or ICSI was used and day of embryo transfer. MAIN RESULTS AND THE ROLE OF CHANCE: There was no increase in the risk of PTB and LBW following PGD versus autologous stimulated IVF +/- ICSI treatment, unadjusted odds of PTB (odds ratio (OR) 0.68, 95% CI: 0.46-0.99) and LBW (OR 0.56, 95% CI: 0.37-0.85). After adjusting for the potential confounders, there was again no increase in the risk of the adverse perinatal outcomes following PGD: PTB (adjusted odds ratio (aOR) 0.66, 95% CI: 0.45-0.98) and LBW (aOR 0.58, 95% CI: 0.38-0.88). LIMITATIONS, REASONS FOR CAUTION: Although the analysis was adjusted for a number of important				**H-Index:** 191

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	confounders, the data set had no information on confounders such as smoking, body mass index and the medical history of women during pregnancy to allow adjustment. There was no information on the stage of embryo at biopsy, whether blastomere or trophectoderm biopsy. WIDER IMPLICATIONS FOR THE FINDINGS: The demonstration that PGD is not associated with higher risk of PTB and LBW provides reassurance towards its current expanding application. STUDY FUNDING/COMPETING INTERESTS: No funding was obtained. There are no competing interests to declare.				
671.	Sunkara, S. K., Antonisamy, B., Selliah, H. Y. and Kamath, M. S. Perinatal outcomes after gestational surrogacy versus autologous IVF: analysis of national data Reprod Biomed Online; 2017, 35 (6): 708-714 **Address:** Queen's Hospital, Barking Havering Redbridge University Hospitals NHS Trust, Essex, UK. **Christian Medical College Hospital, Vellore,** India. **Christian Medical College Hospital, Vellore,** India. Electronic address: dockamz@gmail.com. Anonymized data were obtained from the Human Fertilization and Embryology Authority to determine whether gestational surrogacy influences perinatal outcomes compared with pregnancies after autologous IVF. A total of 103,160 singleton live births, including 244 after gestational surrogacy, 87,571 after autologous fresh IVF and intractyoplasmic sperm injection (ICSI) and 15,345 after autologous frozen embryo transfers were analysed. Perinatal outcomes of pretern birth (PTB), low birth weight (LBW) and high birth weight (HBW) were compared. No difference was found in the risk of PTB and LBW after gestational surrogacy compared with autologous fresh IVF-ICSI: PTB (adjusted OR 0.90, 95% CI 0.56 to 1.42), LBW (adjusted OR 0.90, 95% CI 0.57 to 1.43) and gestational surrogacy compared with autologous frozen embryo transfers: PTB (adjusted OR 0.96, 95% CI 0.58 to 1.60), LBW (adjusted OR 1.16, 95% CI 0.69 to 1.96). The incidence of HBW was significantly higher after gestational surrogacy compared with fresh IVF-ICSI (adjusted OR 1.94, 95% CI 1.38 to 2.75); no difference was found in HBW between gestational surrogacy and autologous frozen embryo transfers. The dataset is limited by lack of information on confounders, i.e. ethnicity, body mass index, underlying medical history, which could result in residual confounding.	**INT**	**JUL TO DEC**	**BIOSTATISTICS, REPRODUCTIVE MEDICINE UNIT**	**PMID:**28951002 **WOS:**000416390500116 **Impact Factor:** 3.249 **H-Index:** 89

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
672.	Sunnapu, Omprakash, Kotla, Niranjan G., Maddiboyina, Balaji, Marepally, Srujan, Shanmugapriya, Jeyabalan, Sekar, Karuppannan, Singaravadivel, Subramanian and Sivaraman, Gandhi Rhodamine-Based Fluorescent Turn-On Probe for Facile Sensing and Imaging of ATP in Mitochondria Chemistryselect; 2017, 2 (25): 7654-7658 We have developed a "turn-on" fluorescent probe ARP-1 as a colorimetric and fluorescent chemosensor for adenosine-5'-triphosphate (ATP) through hydrogen bond interactions. The probe exhibits "turn-on" fluorescence response to ATP with a 15-fold fluorescence intensity enhancement under 10 equiv. of ATP added. The experimental results show that the response behavior of ARP-1 toward ATP is pH independent (pH 4.0-8.0). The novel chemosensor has high specificity towards ATP from other nucleoside polyphosphates such as ADP and AMP. The favorable interaction between a triphosphate unit of ATP and N atoms of probe ARP-1 is attributed to H-bonding. Consequently, the enhanced emission and naked-eye changes are attributed to spirolactam ring-opening. It is evident from our findings that the role of the chain length as well as the NH, OH groups and the phosphate group(s) contribute to interaction between the probe and the nucleotide. Cell permeability and selectivity towards ATP was demonstrated in HeLa Cells. Colocalization experiments were carried out with MitoTracker green and ARP-1 showing that the mitochondrion selective imaging ability of ARP-1. The live cell imaging experiments in HeLa cells exhibited high selectivity of probe ARP-1 with fluorescence turn-On response. ARP-1 could also be explored for understanding the cellular functions.	**INT**	**JUL TO DEC**	**CENTRE FOR STEM CELL RESEARCH**	**NO PMID** **WOS:**000409870000026 **Impact Factor:** 12.111 **H-Index:** NA
673.	Suryawanshi, M., Karnik, S. and Roy, S. Clinicopathological Analysis of Glomerular Disease of Adult Onset Nephrotic Syndrome in an Indian Cohort- A Retrospective Study J Clin Diagn Res; 2017, 11 (5): EC25-EC30 **Address:** Assistant Professor, Department of Pathology, Christian Medical Hospital, Vellore, Tamil Nadu, India. Consultant Oncopathologist and Renal Histopathologist, Department of Pathology, Ruby Hall Clinic, Pune, Maharashtra, India.	**INT**	**JAN TO JUN**	**PATHOLOGY**	**PMID:**28658768 **Impact Factor:** 0.650 **H-Index:** 18

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	INTRODUCTION: Primary glomerular disease presenting with adult onset nephrotic syndrome are a major cause of chronic renal failure worldwide. The spectrum of renal disease presenting with nephrotic syndrome has undergone a gradual change globally over the course of time. However, there still exist regional differences in the incidence of primary glomerular diseases causing adult onset nephrotic syndrome. **AIM:** To observe the spectrum of renal diseases presenting with adult onset nephrotic syndrome with comparative analysis of changing trends over the last five decades with regards to Western and Indian literature. **MATERIALS AND METHODS:** Subjects included patients with age of 18-80 years presenting with nephrotic syndrome. Renal biopsies with immunofluoroscence studies were performed in all patients. Baseline clinical parameters of serum urea, creatinine, albumin, globulin, cholesterol, 24 hour urine protein and urine microscopy were recorded. Descriptive statistics was used and results were expressed as frequencies, percentages, and mean+/-standard deviation. **RESULTS:** A total of 227 patients (72% males) were included for the study. Primary glomerular diseases formed 74.01% of total cases and majority of patients included males in the 4th decade. Minimal Change Disease (MCD) (15.8%) including its variants was the most common primary glomerular disease for adult onset of nephrotic syndrome followed by Mesangial proliferative Glomerulonephritis (MSGN) (13.2%). Membranous nephropathy and Type I Membranoproliferative Glomerulonephritis (MPGN) individually accounted for 12.3% of patients. Focal and Segmental Glomerulosclerosis (FSGS) accounted for only 11% of patients. Although, increased incidence of FSGS has been observed worldwide, there exist important regional differences in primary glomerular diseases in Indian population. MCD remains a major glomerular disease for adult onset nephrotic syndrome in different parts of India. **CONCLUSION:** Our study over three years represents important data of regional variations of primary glomerular diseases presenting with adult onset nephrotic syndrome.				
674.	Susmitha Wils, K., Devasahayam, S. R., Manivannan, M. and Mathew, G. Force model for laparoscopic graspers: implications for virtual simulator design Minim Invasive Ther Allied Technol; 2017, 26 (2): 97-103 **Address:** a Department of Bioengineering, **Christian Medical College vellore**, Tamil Nadu, India.	**INT**	**JAN TO JUN**	**BIOENGINEERING**	**PMID:**27841700 **Impact Factor:** 1.418 **H-Index:** 39

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	b Department of Biotechnology, Indian Institute of Technology Madras, Tamil Nadu, India. c Department of Applied Mechanics, Indian Institute of Technology Madras, Tamil Nadu, India. d Medical Sciences Group, University of Pelita Harapan Medical Sciences, Tangerang, Indonesia. **INTRODUCTION:** Laparoscopic graspers limit haptic perception, which in turn leads to tissue damage. Using virtual simulators to train surgeons in handling these instruments would ensure safer grasp. The design of a laparoscopic virtual simulator with force feedback depends on effective implementation of the grasper force model. **OBJECTIVE:** To develop a laparoscopic grasper tip force model theoretically from grasper mechanics and validate the same experimentally during laparoscopic pinching. **MATERIALS AND METHODS:** We developed a force model for double and single jaw action graspers using grasper mechanics. For experimental validation, the handle angle and the forces at the tip and the handle of the instrumented graspers during laparoscopic pinching of porcine abdominal tissues were measured. The intra-class correlation coefficient (ICC) between experimental and calculated tip force was calculated. RESULT: Excellent ICC (ICC >/=0.8, p<.001) between calculated and experimental tip force was obtained for both graspers for all grasped tissues. Mean absolute forces for all trials while using double and single jaw action graspers were ((FTc = 1.7N, FTe = 1.8N) and (FTc = 2.2N, FTe = 2.8N)) for gall bladder, ((FTc = 3.4N, FTe = 4.4N) and (FTc = 3.3N, FTe = 3.4N)) for liver and ((FTc = 4.2N, FTe = 4.5N) and (FTc = 2.3N, FTe = 2.6N)) for spleen, respectively. **CONCLUSION:** The proposed model may be used for the design of laparoscopic pinching action in a virtual simulator with force feedback and also for better ergonomic design of laparoscopic graspers.				
675.	Suzana, S., Shanmugam, S., Uma Devi, K. R., Swarna Latha, P. N. and Michael, J. S. Spoligotyping of Mycobacterium tuberculosis isolates at a tertiary care hospital in India Trop Med Int Health; 2017, 22 (6): 703-707 **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore,** India. Department of Bacteriology, National Institute for Research in Tuberculosis,	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY**	**PMID:**28374900 **Impact Factor:** 2.850 **H-Index:** 93

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Chennai, India. **OBJECTIVE:** Spoligotyping is a valuable genotyping tool to study the genetic diversity and molecular epidemiology of Mycobacterium tuberculosis (M. tb). The aim of this study was to analyse different spoligotype patterns of M. tb strains isolated from patients with tuberculosis from different parts of India. **MATERIALS AND METHODS:** A total of 163 M. tb isolates were spoligotyped between January 2014 and January 2015. About 47% (n = 77) were from patients with extrapulmonary tuberculosis; of these, 10 were MDR, and seven were Pre-XDR. Of the 86 M. tb isolates from patients with pulmonary tuberculosis, 25 were MDR, and 25 were Pre-XDR. **RESULTS:** We found 61 spoligo patterns, 128 clusters in the spoligotype data base (spoldb4 data base) with spoligo international type (SIT) number and 35 true unique isolates. The most pre-dominant spoligotype was EAI lineage (56), followed by Beijing (28), CAS (20), T(9), U(7), X(3), H(3), BOVIS_1 BCG(1) and LAM(1). **CONCLUSION:** Although our study identified EAI, CAS and Beijing strain lineages as pre-dominant, we also found a large number of orphan strains (20%) in our study. Beijing strains were more significantly associated with MDR TB than CAS and EAI lineages. Further studies on large sample sizes would help to clearly describe the epidemiology of M. tb in India.				
676.	Sv, Soumya, Ebenezer, Jagadish and Antonisamy, B. Role of molar in anterior proclination of teeth – A retrospective study Journal of Pierre Fauchard Academy (India Section); 2017, 31 (2): 51-54 **Address:** a. Department Dental and Oral Surgery II CMCH, Vellore, India b. Department of Biostatistics, CMCH, Vellore, India Objectives 1)To establish if a correlation exists between the position of the molar and anterior proclination of central incisors in Indian population.2)To broaden our treatment options for gaining space to correct malocclusion.3)Emphasise the importance of stable posterior occlusion. Material and methods The sample consisted of 400 lateral cephalograms of patients reported to CMCH, Vellore for diagnosis and treatment of malocclusion. The interincisal angle and the molar position in maxillae were measured using Kodak software and values were tabulated on Excel worksheets. All statistical analysis were done using Statistical Software STATA version 13.1. Results Regression coefficient indicates that 0.4% decrease in the interincisal angle (increase in proclination) for every unit increase in the molar position which is statistically significant at 5% level of significance. The interincisal angle will be 3% higher for male than female which is statistically	**NAT**	**JUL TO DEC**	**DENTAL UNIT II, BIOSTATISTICS**	**Not Indexed in PubMed**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	not significant. Conclusion 1)Molar position in maxillae is affected by various factors and its position has an effect on anterior proclination with 0.4% decrease in interincisal angle for every unit increase in molar position which is statistically significant.2)Anterior occlusion is dependent on posterior occlusion, hence a stable posterior occlusion is a requisite for stability of occlusion.3)Since the anterior occlusion varies with posterior occlusion other modalities of treatment like distalization of molars and TAD's to decrease anchor loss can be an alternative/addition to extraction protocol respectively.				
677.	Syed, Kamran A.; Naina, P.; John, Sheeja S.; Varghese, Ajoy M. Relapsing polychondritis: Anotolaryngologist's perspective Int J Otorhinolaryngol Clin. January-April 2017;9(1):18-20	**INT**	**JAN-JUN**	**OTOLARYNGOLOGY II**	**Indexed in Scopus**
678.	T. Angel Miraclin , Turaka Vijay Prakash , More Atul Ramachandra , Thambu David Sudarsanam A Fatal Case of Yellow Phosphorus Poisoning with Refractory Cardiogenic Shock Toxicology International. Volume 24, Issue 1, January-April 2017 **Address:** Department of Medicine (Unit II), **Christian Medical College, Vellore** Yellow phosphorus (YP), is a commonly used rodenticide paste in India. It is a powerful protoplasmic poison leading to acute fulminant hepatic failure, and has 100 % mortality in patients with delayed presentation. We report a case of a 23 year old man, who presented within 24 hours of consumption of 3% YP with the intent of deliberate self harm. He had a fatal course complicated by refractory cardiogenic shock and multi - organ dysfunction syndrome. Prevention strategies including public awareness of toxicity and restriction of sales of this compound are required on an emergent basis.	**NAT**	**JAN TO JUN**	**MEDICINE**	**Indexed in Scopus**
679.	T.Rohini 1 , S.GideanArularasan 2 , M.Murugan 3 , Hemangiomas of Head and Neck - A Review OSR Journal of Dental and Medical Sciences (IOSR-JDMS) Volume 16, Issue 3 Ver. III (March. 2017), PP 103-106 **Address:** 1.(Department Of Maxillofacial Surgery/Tamilnadu Government Dental College And Hospital/Chennai).2.(Dental /**Christian Medical College And Hospital,Vellore**).	**INT**	**JAN TO JUN**	**DENTAL UNIT II**	**Indexed in Index Copernicus Impact Factor:**0.07

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	3. (Oral And Maxillofacial Surgeon,Madurai) Abstract: Hemangiomas which are tumors of vascular origin constitute 7% of all benign tumours. Hemangiomas of the head and neck region comprise about 60 - 70%. . Hemangiomas can be infantile or congenital Hemangiomas. Infantile Hemangiomas(IH) are more common in pre mature infants. Congenital Hemangiomas are tumors that occur fully grown at birth and do not manifest the postnatal course and lifecycle of common IH. They can be sub classified as rapidly involuting congenital Hemangiomas(RICH) and Non Involuting congenitalHemangiomas(NICH). The purpose of this article is to give a comprehensive review of hemangiomas and the diverse treatment options available for this complex endothelial tumour and to stress the fact of individualizing a treatment protocol.				
680.	Tamir, Sharon Ovnat, Sibbald, Andres, Rupa, Vedantam, Marchisio, Paola, Homøe, Preben, Daniel, Sam J., Enoksson, Frida and Marom, Tal Guidelines for the Treatment of Acute Otitis Media: Why Are There Worldwide Differences? Current Otorhinolaryngology Reports; 2017, 5 (2): 101-107 **Address:** 1.Department of Otolaryngology-Head and Neck Surgery, Assuta Ashdod Medical CenterBen Gurion University Faculty of Health SciencesAshdodIsrael 2.Servicio de PediatríaHospital Británico de Buenos AiresBuenos AiresArgentina 3.Department of ENT, Unit **3Christian Medical College & Hospital, Vellore, India** 4.Pediatric Highly Intensive Care Unit, Department of Pathophysiology and TransplantationUniversità degli Studi di Milano, Fondazione IRCCS Ca' Granda Ospedale Maggiore PoliclinicoMilanItaly 5.Department of Otorhinolaryngology and Maxillofacial SurgeryZealand University HospitalKøgeDenmark 6.Department of Pediatric Otolaryngology, The Montreal Children's HospitalMcGill UniversityQuebecCanada 7.Department of OtorhinolaryngologyHelsingborg HospitalHelsingborgSweden 8.Department of Otolaryngology-Head and Neck Surgery, Assaf Harofeh Medical CenterTel Aviv University Sackler Faculty of MedicineZerifinIsrael This study aims to review differences between acute otitis media (AOM) diagnosis and treatment guidelines from different countries, with regards to the aspects of diagnostic criteria and methods, supplementary tests, treatment options,	**INT**	**JAN TO JUN**	**ENT UNIT 3**	**Indexed in PubMed**

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	recommended first-, second-, and third-line antibiotics, non-antibiotic treatment options, and preventive means and measures.				
681.	Telugu, R. B., Prabhu, A. J., Kalappurayil, N. B., Mathai, J., Gnanamuthu, B. R. and Manipadam, M. T. Clinicopathological Study of 18 Cases of Inflammatory Myofibroblastic Tumors with Reference to ALK-1 Expression: 5-Year Experience in a Tertiary Care Center J Pathol Transl Med; 2017, 51 (3): 255-263 **Address:** Department of General Pathology, **Christian Medical College and Hospital, Vellore**, India. Department of Paediatric Surgery, **Christian Medical College and Hospital, Vellore**, India. Department of Thoracic Surgery, **Christian Medical College and Hospital, Vellore**, India. **BACKGROUND:** Inflammatory myofibroblastic tumor is a histopathologically distinctive neoplasm of children and young adults. According to World Health Organization (WHO) classification, inflammatory myofibroblastic tumor is an intermediate-grade tumor, with potential for recurrence and rare metastasis. There are no definite histopathologic, molecular, or cytogenetic features to predict malignant transformation, recurrence, or metastasis. **METHODS:** A 5-year retrospective study of histopathologically diagnosed inflammatory myofibroblastic tumors of various anatomic sites was conducted to correlate anaplastic lymphoma kinase-1 (ALK-1) expression with histological atypia, multicentric origin of tumor, recurrence, and metastasis. Clinical details of all the cases were noted from the clinical work station. Immunohistochemical stains for ALK-1 and other antibodies were performed. Statistical analysis was done using Fisher exact test. **RESULTS:** A total of 18 cases of inflammatory myofibroblastic tumors were found during the study period, of which 14 were classical. The female-male ratio was 1:1 and the mean age was 23.8 years. Histologically atypical (four cases) and multifocal tumors (three cases, multicentric in origin) were noted. Recurrence was noted in 30% of ALK-1 positive and 37.5% of ALK-1 negative cases, whereas metastasis to the lung, liver, and pelvic bone was noted in the ALK-1 positive group only. **CONCLUSIONS:** Overall, ALK-1 protein was expressed in 55.6% of inflammatory myofibroblastic tumors. There was no statistically significant correlation between	**INT**	**JAN TO JUN**	**GENERAL PATHOLOGY, PAEDIATRIC SURGERY, THORACIC SURGERY**	**PMID:**28415158 **Impact Factor:** NA **H-Index:** 14

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	ALK-1 expression, tumor type, recurrence and metastasis. However, ALK-1 immunohistochemistry is a useful diagnostic aid in the appropriate clinical and histomorphologic context.				
682.	Thakar, S., Sivaraju, L., Jacob, K. S., Arun, A. A., Aryan, S., Mohan, D., Sai Kiran, N. A. and Hegde, A. S. A points-based algorithm for prognosticating clinical outcome of Chiari malformation Type I with syringomyelia: results from a predictive model analysis of 82 surgically managed adult patients J Neurosurg Spine; 2018, 28 (1): 23-32 **Address:** Department of Neurological Sciences, Sri Sathya Sai Institute of Higher Medical Sciences, Bangalore; and. Department of Psychiatry, **Christian Medical College, Vellore,** India. OBJECTIVE Although various predictors of postoperative outcome have been previously identified in patients with Chiari malformation Type I (CMI) with syringomyelia, there is no known algorithm for predicting a multifactorial outcome measure in this widely studied disorder. Using one of the largest preoperative variable arrays used so far in CMI research, the authors attempted to generate a formula for predicting postoperative outcome. METHODS Data from the clinical records of 82 symptomatic adult patients with CMI and altered hindbrain CSF flow who were managed with foramen magnum decompression, C-1 laminectomy, and duraplasty over an 8-year period were collected and analyzed. Various preoperative clinical and radiological variables in the 57 patients who formed the study cohort were assessed in a bivariate analysis to determine their ability to predict clinical outcome (as measured on the Chicago Chiari Outcome Scale [CCOS]) and the resolution of syrinx at the last follow-up. The variables that were significant in the bivariate analysis were further analyzed in a multiple linear regression analysis. Different regression models were tested, and the model with the best prediction of CCOS was identified and internally validated in a subcohort of 25 patients. RESULTS There was no correlation between CCOS score and syrinx resolution (p = 0.24) at a mean +/- SD follow-up of 40.29 +/- 10.36 months. Multiple linear regression analysis revealed that the presence of gait instability, obex position, and the M-line-fourth ventricle vertex (FVV) distance correlated with CCOS score, while the presence of motor deficits was associated with poor syrinx resolution (p </= 0.05). The algorithm generated from the regression model demonstrated good diagnostic accuracy (area under curve 0.81), with a score of	**INT**	**JUL TO DEC**	**PSYCHIATRY**	**PMID:**29125433 **Impact Factor:**2.696 **H-Index:** 71

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	more than 128 points demonstrating 100% specificity for clinical improvement (CCOS score of 11 or greater). The model had excellent reliability (kappa = 0.85) and was validated with fair accuracy in the validation cohort (area under the curve 0.75). CONCLUSIONS The presence of gait imbalance and motor deficits independently predict worse clinical and radiological outcomes, respectively, after decompressive surgery for CMI with altered hindbrain CSF flow. Caudal displacement of the obex and a shorter M-line-FVV distance correlated with good CCOS scores, indicating that patients with a greater degree of hindbrain pathology respond better to surgery. The proposed points-based algorithm has good predictive value for postoperative multifactorial outcome in these patients.				
683.	Thakkar, K., Mariappan, R. and Nair, B. R. Detection and management of intraoperative seizure with bispectral index monitoring in a paralyzed patient Neurol India; 2017, 65 (Supplement): S100-S101 **Address:** Department of Anaesthesia, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Neurological Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JAN TO JUN**	**ANAESTHESIA, NEUROLOGICAL SCIENCES**	**PMID:**28281505 **Impact Factor:** 1.758 **H-Index:** 39
684.	Thangakunam, B., Bal, S. K., Venkatapathy, A. V., Irodi, A. and Christopher, D. J. A rare cause of ventilatory failure in a patient with post-traumatic intracranial hemorrhage Lung India; 2017, 34 (4): 390-392 **Address:** Department of Pulmonary Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Flinders Medical Centre, Bedford Park, South, Australia. Department of Radiology, **Christian Medical College, Vellore,** Tamil Nadu, India. High minute ventilation is required to lower intracranial pressures in patients with intracranial bleed. Respiratory acidemia consequent to ventilatory difficulty is dangerous in such patients as it further raises intracranial tension. We describe such a case. A 24-year-old man had to be intubated and mechanically ventilated after he met with a road traffic accident and sustained extensive maxillofacial injuries and intracranial bleed. A tooth was accidentally aspirated in this injury and progressively resulted in left lower lobe collapse, pneumomediastinum, and	**NAT**	**JUL TO DEC**	**PULMONARY MEDICINE, RADIOLOGY**	**PMID:**28671175 **PMCID:**5504901 **Impact Factor:** 0.530 **H-Index:** 14

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	consequent difficult ventilation. Under video bronchoscope guidance, the tooth was removed with grasping forceps. Pneumomediastinum temporarily increased after the tooth removal, but by 12 h postextraction, resolution of both the pneumomediastinum and left lower lobe collapse was observed. There was a 17 h delay postadmission before the cause of ventilatory failure was realized. Aspiration of foreign bodies, in general, and teeth, in particular, should be actively looked for in patients with ventilatory difficulties in the post-trauma setting.				
685.	Thangakunam, B., Isaac, B. T. J. and Christopher, D. J. Endobronchial ultrasound experience in a high tuberculosis prevalence setting Indian J Tuberc; 2017, 64 (3): 196-200 **Address:** Department of Pulmonary Medicine, **Christian Medical College, Vellore,** India. Department of Pulmonary Medicine, **Christian Medical College, Vellore,** India. Electronic address: barneyisaac98@gmail.com. BACKGROUND: Most of the published endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA) data are from the western countries, establishing the role of EBUS-TBNA in the diagnosis and staging of lung cancer. The etiology of mediastinal lymphadenopathy may be different in an ethnic group with a high prevalence of tuberculosis (TB). OBJECTIVE: To assess the etiology of mediastinal adenopathy in a high TB prevalence setting and to determine the performance of various tests in the diagnosis of tuberculous mediastinal lymphadenitis. METHODS: Retrospective analysis of bronchoscopic data of patients who underwent endobronchial ultrasound (EBUS) in a tertiary care center in India. RESULTS: Out of 138 patients who underwent EBUS, 63 (46%) had granulomatous disease. Of the 35 patients with a diagnosis of TB, in 10 (29%), microbiology of EBUS specimens was diagnostic and in 3 (9%), this was the sole diagnostic feature. In 5 (14%) mycobacterial cultures were positive, in 6 (17%) GeneXpert for Mycobacterium tuberculosis/rifampicin resistance (Xpert MTB/RIF) was positive, and in 3 (9%) acid fast smears were positive. CONCLUSION: In high TB prevalence countries, EBUS diagnoses a higher number of granulomatous than malignant diseases. EBUS specimen should, therefore, be subjected also to mycobacterial smear, culture, and Xpert MTB/RIF for optimal results.	**NAT**	**JUL TO DEC**	**PULMONARY MEDICINE**	**PMID:**28709488 **Impact Factor:** 0.340 **H-Index:** 14
686.	Therakathu, J., Yadav, V. K., Keshava, S. N., Gibikote, S., Chavan, G. B. and Shroff, M.	**NAT**	**JAN TO JUN**	**RADIOLOGY**	**PMID:**28515591 **Impact Factor:**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	The current status of pediatric radiology in India: A conference-based survey Indian J Radiol Imaging; 2017, 27 (1): 73-77 **Address:** Department of Radiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Diagnostic Imaging, The Hospital for Sick Children, Toronto, Canada. **INTRODUCTION:** Like most other developing countries, India has a large proportion of children among its population. However, the facilities for adequate treatment of this large population is inadequate. The development of pediatric radiology as a subspecialty is still at an infant stage in India. The goal of our study was to assess the awareness about the current status of pediatric radiology in India. **MATERIALS AND METHODS:** A questionnaire was handed over to all attendees of a pediatric radiology conference to assess their opinion regarding the adequacy of pediatric training and practice in India. The questionnaire consisted of 10 multiple-choice and two descriptive questions. Descriptive statistical methods were used for analyzing the results. **RESULTS:** Eighty-one out of 400 delegates responded to the questionnaire. Among these 81 respondents, 50 (61.7%) felt that exposure to pediatric cases during postgraduate course was inadequate. Sixty-three out of 81 (77.7%) respondents thought that specialized training is required for practicing pediatric radiology, and 79 respondents (97%) felt that the number of such training programmes should increase. Forty-five out of 81 respondents (55.5%) were interested in pursuing pediatric radiology as a career. **CONCLUSION:** According to the opinion of the respondents of our survey, pediatric radiology remains an underdeveloped speciality in India. Considering the proportion of the population in the pediatric age and the poor health indicators in this age group, elaborate measures, as suggested, need to be implemented to improve pediatric radiology training and the care of sick children in India.				NA **H-Index:** 15
687.	Thirumal Kumar, D., Lavanya, P., George Priya Doss, C., Tayubi, I. A., Naveen Kumar, D. R., Francis Yesurajan, I., Siva, R. and Balaji, V. A Molecular Docking and Dynamics Approach to Screen Potent Inhibitors Against Fosfomycin Resistant Enzyme in Clinical Klebsiella pneumoniae Journal of Cellular Biochemistry; 2017, 118 (11): 4088-4094	**INT**	**JAN TO JUN**	**CLINICAL MICROBIOLOGY**	**PMID:**28409871 **WOS:**000411065300056 **Impact Factor:** 3.085 **H-Index:** 141

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: School of Biosciences and Technology, VIT University, Vellore, 632014, India. Department of Clinical Microbiology, **Christian Medical College, Vellore,** 632004, India. Faculty of Computing and Information Technology, King Abdulaziz University, Rabigh, 21911, Saudi Arabia. Klebsiella pneumoniae, BA6753 was cultured from a patient in the Clinical Microbiology Laboratory of **Christian Medical College**. K. pneumoniae, BA6753 has a multidrug resistance plasmid encoding novel FosA variant-7, fosfomycin resistance enzyme. Minimal side effects and a wide range of bactericidal activity of fosfomycin have resulted in its expanded clinical use that prompts the rise of fosfomycin-resistant strains. At present, there are no effective inhibitors available to conflict the FosA-medicated fosfomycin resistance. To develop effective FosA inhibitors, it is crucial to understand the structural and dynamic properties of resistance enzymes. Hence, the present study focuses on the identification of potent inhibitors that can effectively bind to the fosfomycin resistance enzyme, thus predispose the target to inactivate by the second antibiotic. Initially, a series of active compounds were screened against the resistant enzyme, and the binding affinities were confirmed using docking simulation analysis. For efficient activity, the binding affinity of the resistance enzyme ought to be high with the inhibitor than the fosfomycin drug. Consequently, the enzyme-ligand complex which showed higher binding affinity than the fosfomycin was employed for subsequent analysis. The stability of the top scoring enzyme-ligand complex was further validated using molecular dynamics simulation studies. On the whole, we presume that the compound 19583672 demonstrates a higher binding affinity for the resistance enzyme comparing to other compounds and fosfomycin. We believe that further enhancement of the lead compound can serve as a potential inhibitor against resistance enzyme in drug discovery process. J. Cell. Biochem. 9999: 1-7, 2017. (c) 2017 Wiley Periodicals, Inc.				
688.	Thomas, B. P., Fouzia, N. A., Raveendran, S., Pallapati, S. R., Abraham, A. and Srivastava, A. Management of Hemophilic Cysts and Pseudotumors of the Hand in Bleeding Disorders: A Case Series J Hand Surg Am; 2017, **Address:** Paul Brand Centre for Hand Surgery & Peripheral Nerve Surgery, **Christian Medical College**& Hospital, Vellore, Tamil Nadu, India. Electronic address: binu@cmcvellore.ac.in.	**INT**	**JUL TO DEC**	**PAUL BRAND CENTRE FOR HAND SURGERY & PERIPHERAL NERVE SURGERY, HAEMATOLOG**	**PMID:**29268963 **Impact Factor:** 1.606 **H-Index:** 98

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Hematology, **Christian Medical College**& Hospital, Vellore, Tamil Nadu, India. Paul Brand Centre for Hand Surgery & Peripheral Nerve Surgery, **Christian Medical College**& Hospital, Vellore, Tamil Nadu, India. PURPOSE: Hemophilic cysts and pseudotumors (HCPTs) of the hand are rare and are secondary to bleeding disorders such as hemophilia A and B. This is a report of our experience in the management of this rare condition. PATIENTS AND METHODS: Seven male patients with hemophilia A presenting with progressive swelling of the hand were treated between 2004 and 2013 at a tertiary referral hospital. All patients had clotting factor replacement based on our previously reported protocol. The age of the patients ranged from 3 to 49 years (median age, 19 years). RESULTS: Four patients had soft tissue hemophilic cysts and 3 had bony hemophilic pseudotumours. Two patients had traumatic pseudoaneurysm of the ulnar artery in addition to the cysts. The soft tissue cysts required surgical excision in 3 patients under factor cover as per the protocol. The bony lesions were initially managed nonsurgically by factor replacement, but 2 patients failed to respond and required amputation of the fingers. The ulnar artery aneurysm was excised and artery ligated in 1 patient and the artery was vein grafted owing to poor hand perfusion in 1. CONCLUSIONS: Based on our observations in the management of HCPTs of the hand and the existing literature, we conclude that the soft tissue cysts require surgical excision along with factor replacement and distal bony lesions smaller than 3 cm respond to factor replacement. Larger bony lesions require surgical treatment. Treatment of hemophilic cysts and pseudotumours should be undertaken only in centers with a major hematology backup. TYPE OF STUDY/LEVEL OF EVIDENCE: Therapeutic V.			**Y**	
689.	Thomas, B. P., Raveendran, S., Pallapati, S. R. and Anderson, G. A. Augmented hamate replacement arthroplasty for fracture-dislocations of the proximal interphalangeal joints in 12 patients Journal of Hand Surgery-European Volume; 2017, 42 (8): 799-802 **Address:** Paul Brand Centre for Hand Surgery & Peripheral Nerve Surgery, **Christian Medical College**& Hospital, Vellore, India. We report clinical outcomes in 12 patients with hemi-hamate replacement	**INT**	**JAN TO JUN**	**PAUL BRAND CENTRE FOR HAND SURGERY & PERIPHERAL NERVE SURGERY**	**PMID:**28480780 **Impact Factor:** 2.191 **H-Index:** 48

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	arthroplasty combined with volar plate arthroplasty. The volar plate was reattached using trans-osseous sutures to reconstruct the ligament-box complex after hamate grafting to augment the stability of the proximal interphalangeal joint. Ten patients had improved joint movement from a mean of 14 degrees before surgery to a mean of 77 degrees at a minimum follow-up of 2 years. Grip strength and pain of the affected hand and patient-rated hand and wrist scores were improved in these 10 patients. Two patients had poor results. One patient developed ankylosis, and one patient had resorption of the grafted bone. We conclude that the augmented hamate replacement arthroplasty is useful in treating chronic proximal interphalangeal joint fracture-dislocations. LEVEL OF EVIDENCE: IV.				
690.	Thomas, Elsy, Londhe, Vaibhav and Vimala, Leena Robinson Recurrent Prelabor Rupture of Gravid Uterus with Good Clinical Outcome: Once Bitten, Twice Shy! A Case Report Journal of Reproductive Medicine; 2017, 62 (9-10): 580-582 BACKGROUND: Spontaneous prelabor rupture of an unscarred gravid uterus is not commonly seen in clinical practice. A high index of suspicion is required to make the diagnosis, especially in a primigravida. The clinical outcome in terms of fetal salvageability is often poor in such situations. Fetal outcome could be good if managed appropriately in future pregnancies. CASE: We report a patient whom we managed in both pregnancies. In the index pregnancy the diagnosis of uterine rupture was made only intraoperatively, while in the second pregnancy prompt diagnosis and management resulted in a good outcome for both mother and infant. CONCLUSION: Recurrent prelabor rupture of the gravid uterus can result in favorable outcome if managed appropriately. Keywords: abdominal pain, diagnosis, hemoperitoneum, labor onset, pregnancy complications, uterine rupture	**INT**	**JUL TO DEC**	**REPRODUCTIVE MEDICINE**	**NO PMID** **WOS:**000413133900023 **Impact Factor:** 0.848 **H-Index:** 60
691.	Thomas, N., Abiramalatha, T., Bhat, V., Varanattu, M., Rao, S., Wazir, S., Lewis, L., Balakrishnan, U., Murki, S., Mittal, J., Dongara, A., Prashantha, Y. N. and Nimbalkar, S. Phase Changing Material for Therapeutic Hypothermia in Neonates with Hypoxic Ischemic Encephalopathy - A Multi-centric Study Indian Pediatr; 2017,	**NAT**	**JUL TO DEC**	**NEONATOLOGY**	**PMID:**29242417 **Impact Factor:** 1.152 **H-Index:** 41

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Department of Neonatology, **CMC, Vellore,** Tamil Nadu; #Department of Neonatology, JIPMER, Puducherry; $Department of Neonatology, Jubilee Mission Medical College and Research Institute, Thrissur,; Kerala; **Department of Neonatology, St. John's Medical College Hospital, Bengaluru;##The Cradle (by Apollo), Gurgaon; $$Department of Neonatology, KMC, Manipal; ++Sri Ramachandra Medical College Chennai; ***Fernandez Hospital, Hyderabad; ###Neoclinic, Jaipur; $$$Narayana multispeciality hospital, Ahmedabad, Gujarat; and +++Department of Pediatrics, Pramukhswami Medical College, Karamsad, Gujarat; India. Correspondence to: Dr Niranjan Thomasm, Department of Neonatology, **Christian Medical College, Vellore** 632 004, Tamil Nadu, India. niranjan@cmcvellore.ac.in. OBJECTIVE: To assess the feasibility and safety of cooling asphyxiated neonates using phase changing material based device across different neonatal intensive care units in India. DESIGN: Multi-centric uncontrolled clinical trial. SETTING: 11 level 3 neonatal units in India from November 2014 to December 2015. PARTICIPANTS: 103 newborn infants with perinatal asphyxia, satisfying pre-defined criteria for therapeutic hypothermia. INTERVENTION: Therapeutic hypothermia was provided using phase changing material based device to a target temperature of 33.5+/-0.5oC, with a standard protocol. Core body temperature was monitored continuously using a rectal probe during the cooling and rewarming phase and for 12 hours after the rewarming was complete. OUTCOME MEASURES: Feasibility measure - Time taken to reach target temperature, fluctuation of the core body temperature during the cooling phase and proportion of temperature recordings outside the target range. Safety measure - adverse events during cooling. RESULTS: The median (IQR) of time taken to reach target temperature was 90 (45, 120) minutes. The mean (SD) deviation of temperature during cooling phase was 33.5 (0.39oC). Temperature readings were outside the target range in 10.8% (5.1% of the readings were <33oC and 5.7% were >34oC). Mean (SD) of rewarming was 0.28 (0.13)oC per hour. The common adverse events were shock/ hypotension (18%), coagulopathy (21.4%), sepsis/probable sepsis (20.4%) and thrombocytopenia (10.7%). Cooling was discontinued before 72 hours in 18 (17.5%) babies due to reasons such as hemodynamic instability/refractory shock, pulmonary hypertension or bleeding. 7 (6.8%) babies died daring hospitalization. CONCLUSION: Using phase changing material based cooling device and a standard protocol, it was feasible and safe to provide therapeutic hypothermia to asphyxiated neonates across different neonatal units in India. Maintenance of				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	target temperature was comparable to standard servo-controlled equipment.				
692.	Thomas, V. V., George, T., Mishra, A. K., Mannam, P. and Ramya, I. Lateral medullary syndrome after a scorpion sting J Family Med Prim Care; 2017, 6 (1): 155-157 **Address:** Department of Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Radiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Scorpion bites are a common problem in Southern parts of India. The sting of Mesobuthus tamulus belonging to the Buthidae family is known for being fatal. The toxidrome of scorpion sting is known for its effect on the cardiovascular system, and there have been rare reports of cerebrovascular accidents as well. We describe a case of lateral medullary syndrome secondary to scorpion sting. As per the knowledge of the authors, this is the first case report of the same.	**NAT**	**JUL TO DEC**	**MEDICINE, RADIOLOGY**	**PMID:**29026772 **PMCID:**5629884 **Impact Factor:** 0.670 **H-Index:** NA
693.	Thompson, C., Srivastava, A., Skinner, M., Stonebraker, J., Epstein, J., Kauf, T. and Valentino, L. Estimating The Global Annual Bleed Rate In Haemophilia Haemophilia; 2017, 23 86-86	**INT**	**JUL TO DEC**	**HAEMATOLOGY**	**NO PMID** **WOS:**000393554500139 **Impact Factor:** 3.569 **H-Index:** 79
694.	Timmer, M. A., Gouw, S. C., Feldman, B. M., Zwagemaker, A., De Kleijn, P., Pisters, M. F., Schutgens, R. E. G., Blanchette, V., Srivastava, A., David, J. A., Fischer, K. and Van Der Net, J. Measuring activities and participation in persons with haemophilia: A systematic review of commonly used instruments Haemophilia; 2017, **Address:** Van Creveldkliniek, University Medical Center Utrecht, Utrecht University, The Netherlands. Physical Therapy Research, Department of Rehabilitation, Physical Therapy Science and Sport, Brain Center Rudolf Magnus, Utrecht University, The Netherlands. Department of Pediatric Hematology, Academic Medical Center, Amsterdam, The Netherlands. Division of Rheumatology, Department of Paediatrics, The Hospital for Sick	**INT**	**JUL TO DEC**	**HAEMATOLOGY, PMR**	**PMID:**29178149 **Impact Factor:** 3.569 **H-Index:** 79

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Children, Institute of Health Policy, Management and Evaluation, Dalla Lana School of Public Health, University of Toronto, Toronto, ON, Canada. Center for Physical Therapy Research and Innovation in Primary Care, Julius Health Care Centers, Utrecht, The Netherlands. Department of Pediatrics, Division of Hematology/Oncology Hospital for Sick Children, University of Toronto, Toronto, ON, Canada. Department of Haematology, **Christian Medical College, Vellore,** India. Department of Physical Medicine and Rehabilitation, **Christian Medical College, Vellore,** India. Department of Child Development and Exercise, University Medical Center Utrecht and Children's Hospital, Utrecht University, The Netherlands. INTRODUCTION: Monitoring clinical outcome in persons with haemophilia (PWH) is essential in order to provide optimal treatment for individual patients and compare effectiveness of treatment strategies. Experience with measurement of activities and participation in haemophilia is limited and consensus on preferred tools is lacking. AIM: The aim of this study was to give a comprehensive overview of the measurement properties of a selection of commonly used tools developed to assess activities and participation in PWH. METHODS: Electronic databases were searched for articles that reported on reliability, validity or responsiveness of predetermined measurement tools (5 self-reported and 4 performance based measurement tools). Methodological quality of the studies was assessed according to the COSMIN checklist. Best evidence synthesis was used to summarize evidence on the measurement properties. RESULTS: The search resulted in 3453 unique hits. Forty-two articles were included. The self-reported Haemophilia Acitivity List (HAL), Pediatric HAL (PedHAL) and the performance based Functional Independence Score in Haemophilia (FISH) were studied most extensively. Methodological quality of the studies was limited. Measurement error, cross-cultural validity and responsiveness have been insufficiently evaluated. CONCLUSION: Albeit based on limited evidence, the measurement properties of the PedHAL, HAL and FISH are currently considered most satisfactory. Further research needs to focus on measurement error, responsiveness, interpretability and cross-cultural validity of the self-reported tools and validity of performance based tools which are able to assess limitations in sports and leisure activities.				
695.	Trowbridge, P., P, D., Premkumar, P. S. and Varghese, G. M.	**INT**	**JAN TO JUN**	**COMMUNITY HEALTH**	**PMID:**28173608 **Impact Factor:**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Prevalence and risk factors for scrub typhus in South India Trop Med Int Health; 2017, 22 (5): 576-582 **Address:** Spectrum Health Center for Integrative Medicine, Grand Rapids, MI, USA. Tufts Medical Center/Tufts University, Boston, MA, USA. **Christian Medical College, Vellore,** India. **OBJECTIVE:** To determine the prevalence and risk factors of scrub typhus in Tamil Nadu, South India. **METHODS:** We performed a clustered seroprevalence study of the areas around Vellore. All participants completed a risk factor survey, with seropositive and seronegative participants acting as cases and controls, respectively, in a risk factor analysis. After univariate analysis, variables found to be significant underwent multivariate analysis. **RESULTS:** Of 721 people participating in this study, 31.8% tested seropositive. By univariate analysis, after accounting for clustering, having a house that was clustered with other houses, having a fewer rooms in a house, having fewer people living in a household, defecating outside, female sex, age >60 years, shorter height, lower weight, smaller body mass index and smaller mid-upper arm circumference were found to be significantly associated with seropositivity. After multivariate regression modelling, living in a house clustered with other houses, female sex and age >60 years were significantly associated with scrub typhus exposure. **CONCLUSIONS:** Overall, scrub typhus is much more common than previously thought. Previously described individual environmental and habitual risk factors seem to have less importance in South India, perhaps because of the overall scrub typhus-conducive nature of the environment in this region.				2.850 **H-Index:** 93
696.	Trupthi M.C., Rita Ruby Anbuselvi Albert Deceptive malignancy of the glottis Med-ej, The Tamil Nadu Dr. MGR Medical University, Chennai Apr 2017	**NAT**	**JAN-JUN**	**OTOLARYNGOLOGY V / ENT UNIT 5**	**Not Indexed in PubMed**
697.	Truscott, J. E., Werkman, M., Wright, J. E., Farrell, S. H., Sarkar, R., Asbjornsdottir, K. and Anderson, R. M. Identifying optimal threshold statistics for elimination of hookworm using a stochastic simulation model Parasit Vectors; 2017, 10 (1): 321 **Address:** London Centre for Neglected Tropical Disease Research (LCNTDR),	**INT**	**JUL TO DEC**	**GASTROINTESTINAL SCIENCES**	**PMID:**28666452 **PMCID:**5493114 **Impact Factor:** 3.080 **H-Index:** 51

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Department of Infectious Disease Epidemiology, St. Mary's Campus, Imperial College London, W2 1PG, London, UK. j.truscott@imperial.ac.uk. The DeWorm3 Project, The Natural History Museum of London, London, SW7 5BD, UK. j.truscott@imperial.ac.uk. London Centre for Neglected Tropical Disease Research (LCNTDR), Department of Infectious Disease Epidemiology, St. Mary's Campus, Imperial College London, W2 1PG, London, UK. The DeWorm3 Project, The Natural History Museum of London, London, SW7 5BD, UK. Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** 632004, India. Department of Global Health, University of Washington, Seattle, USA. BACKGROUND: There is an increased focus on whether mass drug administration (MDA) programmes alone can interrupt the transmission of soil-transmitted helminths (STH). Mathematical models can be used to model these interventions and are increasingly being implemented to inform investigators about expected trial outcome and the choice of optimum study design. One key factor is the choice of threshold for detecting elimination. However, there are currently no thresholds defined for STH regarding breaking transmission. METHODS: We develop a simulation of an elimination study, based on the DeWorm3 project, using an individual-based stochastic disease transmission model in conjunction with models of MDA, sampling, diagnostics and the construction of study clusters. The simulation is then used to analyse the relationship between the study end-point elimination threshold and whether elimination is achieved in the long term within the model. We analyse the quality of a range of statistics in terms of the positive predictive values (PPV) and how they depend on a range of covariates, including threshold values, baseline prevalence, measurement time point and how clusters are constructed. RESULTS: End-point infection prevalence performs well in discriminating between villages that achieve interruption of transmission and those that do not, although the quality of the threshold is sensitive to baseline prevalence and threshold value. Optimal post-treatment prevalence threshold value for determining elimination is in the range 2% or less when the baseline prevalence range is broad. For multiple clusters of communities, both the probability of elimination and the ability of thresholds to detect it are strongly dependent on the size of the cluster and the size distribution of the constituent communities. Number of communities in a cluster is a key indicator of probability				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	of elimination and PPV. Extending the time, post-study endpoint, at which the threshold statistic is measured improves PPV value in discriminating between eliminating clusters and those that bounce back. CONCLUSIONS: The probability of elimination and PPV are very sensitive to baseline prevalence for individual communities. However, most studies and programmes are constructed on the basis of clusters. Since elimination occurs within smaller population sub-units, the construction of clusters introduces new sensitivities for elimination threshold values to cluster size and the underlying population structure. Study simulation offers an opportunity to investigate key sources of sensitivity for elimination studies and programme designs in advance and to tailor interventions to prevailing local or national conditions.				
698.	Vadivelu, M., Rathore, S., Benjamin, S. J., Abraham, A., Belavendra, A. and Mathews, J. E. Randomized controlled trial of the effect of amniotomy on the duration of spontaneous labor Int J Gynaecol Obstet; 2017, **Address:** Department of Obstetrics and Gynaecology, **Christian Medical College, Vellore,** Tamilnadu, India. Department of Biostatistics, **Christian Medical College, Vellore,** Tamilnadu, India. **OBJECTIVE:** To investigate the effect of amniotomy on the duration of spontaneous labor. **METHODS:** In the present randomized controlled trial, women in spontaneous labor with singleton pregnancies presenting at a tertiary teaching hospital in South India between August 1, 2014, and October 31, 2015, were randomized in a 1:1 ratio to undergo amniotomy or conservative management. The primary outcome was the duration of labor. Per-protocol analyses were performed and the duration of labor was compared between the groups of patients. **RESULTS:** There were 144 patients randomized to each group. The median duration of labor was 235 minutes (interquartile range 117-355) in the amniotomy group and 364 minutes (interquartile range 201-580) in the conservative management group (P<0.001). **CONCLUSION:** Amniotomy was associated with a shorter duration of labor in comparison with conservative management in patients with singleton pregnancies experiencing spontaneous labor. Clinical Trials Registry-India: (CTRI) (CTRI/2014/12/005264).	**INT**	**JAN TO JUN**	**OG III / OGV**	**PMID:**28485828 **Impact Factor:** 2.174 **H-Index:** 81

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
699.	Vaibhav Londhe, Beulah Roopavathana, Dipti Londhe, Anu Eapen, Hepsy YS, Jiji Elizabeth Mathews Diagnosis and Outcomes of Appendicitis Complicating Pregnancy in a Tertiary Care Centre-A 10 year Experience International Journal of Anatomy,Radiology and Surgery. Oct-17 **Correspondence Address:** Dr. Jiji Elizabeth Mathews, Professor and HOU-5, Department of Obstetrics and Gynaecology, 7th Floor, ISSCC Building, **Christian Medical College and Hospital,** Vellore-632004, Tamil Nadu, India. E-mail: coronistrial@yahoo.co.in 1. Associate Professor, Department of Obstetrics and Gynaecology, **Christian Medical College and Hospital,** Vellore, Tamil Nadu, India. 2. Assistant Professor, Department of Surgery, **Christian Medical College and Hospital,** Vellore, Tamil Nadu, India. 3. Associate Professor, Department of Pathology, **Christian Medical College and Hospital,** Vellore, Tamil Nadu, India. 4. Professor, Department of Radiology, **Christian Medical College and Hospital,** Vellore, Tamil Nadu, India. 5. Senior Demonstrator, Department of Biostatistics, **Christian Medical College and Hospital,** Vellore, Tamil Nadu, India. 6. Professor, Department of Obstetrics and Gynaecology, **Christian Medical College and Hospital,** Vellore, Tamil Nadu, India. http://www.ijars.net/back_issues.asp?issn=2277-8543&year=2017&month=October&volume=6&issue=4&page=SO06-SO11&id=2332	**NAT**	**JUL TO DEC**	**OG UNIT V**	**Indexed in Index Copernicus**
700.	Varatharajan, S., Abraham, A., Karathedath, S., Ganesan, S., Lakshmi, K. M., Arthur, N., Srivastava, V. M., George, B., Srivastava, A., Mathews, V. and Balasubramanian, P. ATP-binding casette transporter expression in acute myeloid leukemia: association with in vitro cytotoxicity and prognostic markers Pharmacogenomics; 2017, 18 (3): 235-244 **Address:** Department of Haematology, **Christian Medical College, Vellore,** India. Cytogenetics Unit, **Christian Medical College, Vellore,** India. **INTRODUCTION:** Drug resistance and relapse are considered to be the major	**INT**	**JAN TO JUN**	**HAEMATOLOGY, CYTOGENETICS**	**PMID:**28112576 **Impact Factor:** 2.350 **H-Index:** 77

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	reasons for treatment failure in acute myeloid leukemia (AML). There is limited data on the role of ABC transporter expression on in vitro sensitivity to cytarabine (Ara-C) and daunorubicin (Dnr) in primary AML cells. PATIENTS &**METHODS:** RNA expression levels of 12 ABC transporters were analyzed by real-time quantitative PCR in 233 de novo adult acute myeloid leukemia patients. Based on cytarabine or Dnr IC50, the samples were categorized as sensitive, intermediate and resistant. Role of candidate ABC transporter RNA expression on in vitro cytotoxicity, treatment outcome post therapy as well as the influence of various prognostic markers on ABC transporter expression were analyzed. **RESULTS:** Expression of ABCC3 and ABCB6 were significantly higher in Dnr-resistant samples when compared with Dnr-sensitive samples. Increased ABCC1 expression was associated with poor disease-free survival in this cohort of patients. **CONCLUSION:** This comprehensive analysis suggests ABCC1, ABCC3, ABCB6 and ABCA5 as probable targets which can be modulated for improving chemotherapeutic responses.				
701.	Varghese, A., Devi, A., George, P. V. and Livingstone, R. S. Radiation dose and risk in children undergoing cardiac interventions performed using flat detector angiography systems J Radiol Prot; 2017, 37 (4): 927-937 **Address:** Department of Radiology, **Christian Medical College and Hospital, Vellore** 632 004, Tamil Nadu, South India. The purpose of the study was to measure radiation doses and estimate risk from various beam projections in children undergoing cardiac interventions. The dose area product (DAP) was measured for eleven patent ductus arteriosus device closures (PDA), four atrial septal defect device closures (ASD), and three balloon pulmonary valvuloplasty (BPV) interventions performed using a flat detector system. The total mean DAPs for PDA, ASD and BPV were 1.9 Gycm(2), 9.8 Gycm(2) and 6.2 Gycm(2) respectively. The fluoroscopic kerma dose rates increased by 10%, 33% and 92% when changing the projection from posterior-anterior to lateral projection for PDA interventions among infants, <5 yrs and >5 yrs respectively. The effective dose (ED) and organ doses were estimated from DAP using Monte Carlo software. Lungs received the highest organ dose of 7.4 mGy (PDA), 20.7 mGy (ASD) and 17.3 mGy (BPV) compared to other organs. The mean EDs from PDA, ASD and BPV were 2.5 mSv, 6.1 mSv and 4.9 mSv respectively. PDA intervention performed in infants had a radiation risk 66% higher than children aged between 3-10 years. Their lifetime attributable risk as per BEIR	**INT**	**JUL TO DEC**	**RADIOLOGY**	**PMID:**28885191 **Impact Factor:** 1.657 **H-Index:** 35

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	VII for cancer incidence was 1 in 907 males and 1 in 1047 females.				
702.	Varghese, L., Mathew, J., John, S. and Job, A. Treatment of Advanced Carcinoma of the Larynx and Hypopharynx with Laser Followed by External Radiotherapy Iran J Otorhinolaryngol; 2017, 29 (94): 247-253 **Address:** Department of Otorhinolaryngology, **Christian Medical College, Vellore,** India. Department of Radiotherapy, **Christian Medical College, Vellore,** India. INTRODUCTION: Radical laryngeal surgeries for extensive laryngeal and hypopharyngeal tumors often require a permanent tracheostomy, which has an immense impact on the quality of life of patients. A minimally invasive technique such as transoral laser microresection (TLM) followed by radiotherapy can preserve the functions of the voice and swallowing. The aim of this study is to evaluate the role of laser debulking in the treatment of carcinoma of the larynx and hypopharynx, to evaluate the response of the tumor to subsequent radiotherapy, and also to assess the usefulness of laser in avoiding tracheostomy and functional preservation of the voice and swallowing. MATERIALS AND METHODS: This prospective cohort study included patients with carcinoma of the larynx and hypopharynx unwilling to have definitive surgery and those medically unfit for radical surgery. The clinical profile of patients at presentation, tumor status following laser debulking, immediately after radiotherapy (RT), 6 weeks post RT, 3 months post RT, and at the end of study; short term complications associated with laser surgery; and usefulness of laser in avoiding tracheostomy and in functional preservation of the voice were evaluated. RESULTS: There were 18 (90%) male patients and 2 (10%) female patients. Age ranged from 24 to 78 years with a mean age of 55. Hoarseness of voice was the most frequent presenting complaint (90%) followed by progressive dysphagia (45%), odynophagia (40%), otalgia (40%), and dyspnoea (25%). 11 (55%) patients had T3 tumors, while 6 (30%) were T2, and 3 (15%) were T4 lesions. 65% of patients were free of lymph node metastasis at presentation. 2 (10%) had N1 and 5 (25%) had N2 nodes. At presentation 10 (50%) patients had Stage III disease and 6 (30%) had stage IV disease. 13 patients (65%) had moderately differentiated squamous cell carcinoma. None of the risk factors and co-morbid illnesses showed any statistically significant difference among the tumor sites. Apart from the 2 (10%) patients who	**INT**	**JUL TO DEC**	**ENT UNIT 3, RADIOTHERAPY**	**PMID:**28955672 **PMCID:**5610372 **Impact Factor:** 0.890 **H-Index:** 5

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	had residual disease, 2 (10%) patients developed a recurrent tumor in the course of their follow up. None had neck recurrence. Two patients underwent tracheostomy, before laser surgery, for compromised airway and both had recurrence of their tumor and continued to be on tracheostomy. CONCLUSION: Laser debulking followed by radiotherapy is a viable alternative in the management of malignancies of the larynx and hypopharynx for those who refuse radical surgery and for those patients in whom radical open surgery is impractical due to physiological reasons such as advanced age and poor pulmonary reserve.				
703.	Varghese, Lijo Intervention in Rare Presentation of Aortoarteritis - TCTAP C-056 Journal of the American College of Cardiology; 2017, 69 (16): S146-S147 **Author Information:** **Christian Medical College vellore**, India http://www.onlinejacc.org/content/accj/69/16_Supplement/S146.2.full.pdf	**INT**	**JUL TO DEC**	**CARDIOLOGY**	**NO PMID** **WOS:**000404071800230 **Impact Factor:**19.896 **H-Index:**369
704.	Varghese, R., Jayaraman, R. and Veeraraghavan, B. Current challenges in the accurate identification of Streptococcus pneumoniae and its serogroups/serotypes in the vaccine era J Microbiol Methods; 2017, 141 48-54 **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore,** India. Department of Clinical Microbiology, **Christian Medical College, Vellore,** India. Electronic address: vbalaji@cmcvellore.ac.in. Streptococcus pneumoniae is a major cause of pneumonia, meningitis and other invasive diseases resulting in high mortality and morbidity among children under the age of five. Inaccurate identification of S. pneumoniae masks the exact estimation of disease burden and could delay treatment options. This is the common problem most frequently faced in developing countries due to several reasons that include poor infrastructure, insensitive operational procedures and lack of expertise. Inconsistent methods for phenotypic detection often delay the early identification and confirmation of S. pneumoniae. For serotyping S. pneumoniae, Quellung method is the gold standard which can be performed only on viable isolates, needs expertise and is expensive. Therefore, the data available	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY**	**PMID:**28780272 **Impact Factor:** 1.790 **H-Index:** 111

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	on disease burden and serotype prevalence is not truly estimated in most of the developing countries, in turn, the use of available pneumococcal vaccines have been restricted. This current review deliberates an overview on advantages and limitations of routinely used phenotypic tests for S. pneumoniae identification. Also discussed in this review are the roles and current challenges faced by various molecular identification and serogroup/serotype identification methods of S. pneumoniae, including PCR, real time PCR, sequence analysis of different specific genes of S. pneumoniae, PCR combined with RFLP, MALDI-TOF, MLST, MLSA and WGS.				
705.	Varghese, S. S., Sasidharan, B., Manipadam, M. T., Paul, M. J. and Backianathan, S. Radiotherapy in Phyllodes Tumour J Clin Diagn Res; 2017, 11 (1): XC01-XC03 **Address:** Associate Physician, Department of Radiation Oncology, **Christian Medical College, Vellore,** Tamil Nadu, India. Associate Professor, Department of Radiation Oncology, **Christian Medical College, Vellore,** Tamil Nadu, India. Professor, Department of Pathology, **Christian Medical College, Vellore,** Tamil Nadu, India. Professor, Department of Surgery, **Christian Medical College, Vellore,** Tamil Nadu, India. Professor, Department of Radiation Oncology, **Christian Medical College, Vellore,** Tamil Nadu, India. **INTRODUCTION:** Phyllodes Tumour (PT) of the breast is a relatively rare breast neoplasm (<1%) with diverse range of pathology and biological behaviour. **AIM:** To describe the clinical course of PT and to define the role of Radiotherapy (RT) in PT of the breast. **MATERIALS AND METHODS:** Retrospective analysis of hospital data of patients with PT presented from 2005 to 2014 was done. Descriptive statistics was used to analyze the results. Simple description of data was done in this study. Age and duration of symptoms were expressed in median and range. Percentages, tables and general discussions were used to understand the meaning of the data analyzed. **RESULTS:** Out of the 98 patients, 92 were eligible for analysis. The median age of presentation was 43 years. A total of 64/92 patients were premenopausal. There was no side predilection for this tumour but 57/92 patients presented as an upper outer quadrant lump. Fifty percent of the patients presented as giant (10 cm) PT. The median duration of symptoms was 12 months	**INT**	**JAN TO JUN**	**RADIATION ONCOLOGY, PATHOLOGY, SURGERY**	**PMID:**28274029 **Impact Factor:** 0.650 **H-Index:** 18

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	(range: 1-168 months). A 60% of patients had Benign (B), 23% had Borderline (BL) and 17% had malignant (M) tumours. The surgical treatment for benign histology included Lumpectomy (L) for 15%, Wide Local Excision (WLE) for 48%, and Simple Mastectomy (SM) for 37%. All BL and M tumours were treated with WLE or SM. There was no recurrence in B and BL group when the margin was >/=1 cm. All non-metastatic M tumours received adjuvant RT irrespective of their margin status. Total 3/16 patients with M developed local recurrence. Total 6/16 M patients had distant metastases (lung or bone). Our median duration of follow up was 20 months (range: 1-120 months). **CONCLUSION:** Surgical resection with adequate margins (>1 cm) gave excellent local control in B and BL tumours. For patients with BL PT, local radiotherapy is useful, if margins are close or positive even after the best surgical resection. There is a trend towards improved local control with adjuvant radiotherapy for malignant PT. Metastatic malignant PT has a poor outcome.				
706.	Varghese, V., Saravana Kumar, G. and Krishnan, V. Effect of various factors on pull out strength of pedicle screw in normal and osteoporotic cancellous bone models Med Eng Phys; 2017, 40 28-38 **Address:** Biomedical Devices and Technology, Department of Biotechnology, IIT Madras, Chennai 600036, India. Electronic **Address:** vicky.varghese@gmail.com Department of Engineering Design, IIT Madras, Chennai 600036, India. Electronic **Address:** gsaravana@iitm.ac.in Spinal Disorder Surgery Unit, Department of orthopedics, **Christian Medical College, Vellore** 632004, Tamil Nadu, India. Electronic **Address:** venkateshortho1@cmcvellore.ac.in Pedicle screws are widely used for the treatment of spinal instability by spine fusion. Screw loosening is a major problem of spine fusion, contributing to delayed patient recovery. The present study aimed to understand the factor and interaction effects of density, insertion depth and insertion angle on pedicle screw pull out strength and insertion torque. A pull out study was carried out on rigid polyurethane foam blocks representing osteoporotic to normal bone densities according to the ASTM-1839 standard. It was found that density contributes most to pullout strength and insertion torque. The interaction effect is significant ($p < 0.05$) and contributes 8% to pull out strength. Axial pullout strength was 34%	**INT**	**JAN TO JUN**	**SPINAL DISORDER SURGERY UNIT**	**PMID:**27939099 **Impact Factor:** 1.819 **H-Index:** 84

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	lower than angled pull out strength in the osteoporotic bone model. Insertion angle had no significant effect ($p > 0.05$) on insertion torque. Pullout strength and insertion torque had no significant correlation ($p > 0.05$) in the case of the extremely osteoporotic bone model.				
707.	Varkki, S. D. and Paul, G. R. Cystic Fibrosis Experience from a Tertiary Medical Center in Southern India Pediatric Pulmonology; 2017, 52 S411-S411	**INT**	**JUL TO DEC**	**PULMONARY MEDICINE, CHILD HEALTH**	**NO PMID** **WOS:**000411113700587 **Impact Factor:**2.758 **H-Index:** 92
708.	Varsha, A. V., George, G. and Sahajanandan, R. Lutembacher syndrome: Dilemma of doing a tricuspid annuloplasty Ann Card Anaesth; 2017, 20 (4): 456-458 **Address:** Department of Cardiothoracic Surgery, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Anaesthesiology, **Christian Medical College, Vellore,** Tamil Nadu, India. We discuss the case of a 24-year-old woman with Lutembacher syndrome and severe tricuspid regurgitation (TR) who underwent surgical closure of atrial septal defect and mitral valve replacement without tricuspid annuloplasty despite a severe TR and a large tricuspid annulus on preoperative echo. The pathophysiology of Lutembacher syndrome is discussed below. The utility of perioperative echocardiography in assessing the annular diameter, tenting area and coaptation depth and thus providing insights into the functioning of the tricuspid valve will also be emphasized.	**INT**	**JUL TO DEC**	**CARDIOTHORACIC SURGERY, ANAESTHESIA**	**PMID:**28994686 **PMCID:**5661320 **Impact Factor:** 1.340 **H-Index:** 18
709.	Vaz, T. and Singh, G. Large-volume Epidural Blood Patch: An Alternative Technique J Neurosurg Anesthesiol; 2017, 29 (3): 359-360 **Address:Christian Medical College and Hospital** Vellore, Tamil Nadu, India.	**INT**	**JUL TO DEC**	**ANAESTHESIA**	**PMID:**26886863 **Impact Factor:** 3.925 **H-Index:** 52
710.	Veeraraghavan, B., Devanga Ragupathi, N. K., Santhanam, S., Verghese, V. P., Inbanathan, F. Y. and Livingston, C.	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLO**	**PMID:**29021957 **PMCID:**5633162

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Whole genome shotgun sequencing of Indian strains of Streptococcus agalactiae Genom Data; 2017, 14 63-65 **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore** 632004, India. Department of Neonatology, **Christian Medical College, Vellore** 632004, India. Department of Child Health, **Christian Medical College, Vellore** 632004, India. Group B streptococcus is known as a leading cause of neonatal infections in developing countries. The present study describes the whole genome shotgun sequences of four Group B Streptococcus (GBS) isolates. Molecular data on clonality is lacking for GBS in India. The present genome report will add important information on the scarce genome data of GBS and will help in deriving comparative genome studies of GBS isolates at global level. This Whole Genome Shotgun project has been deposited at DDBJ/ENA/GenBank under the accession numbers NHPL00000000 - NHPO00000000.			**GY, NEONATOLOGY, CHILD HEALTH**	**Impact Factor:** 0.560 **H-Index:** 7
711.	Veeraraghavan, B., Lal, B., Devanga Ragupathi, N. K., Neeravi, I. R., Jeyaraman, R., Varghese, R., Paul, M. M., Baskaran, A. and Ranjan, R. First genome report on novel sequence types of N. meningitidis: ST12777 and ST12778 J Glob Antimicrob Resist; 2017, **Address:** Department of Clinical Microbiology, **Christian Medical College, Vellore** - 632004, India. Electronic address: vbalaji@cmcvellore.ac.in. Department of Clinical Microbiology, **Christian Medical College, Vellore** - 632004, India. OBJECTIVES: N. meningitidis is one of the important causative agent of meningitis and/or sepsis with high morbidity and mortality. Baseline genome data on N. meningitidis, especially from developing countries like India is lacking. The study aimed to investigate the whole genome sequences of N. meningitidis isolates from a tertiary care centre in India. METHODS: Whole genome sequencing was performed using Ion Torrent PGM with 400bp chemistry. Data was assembled de novo using AssemblerSPAdes v5.0.0.0 and the sequence annotation was performed through PATRIC, RAST and NCBI server. Downstream analysis of the isolates were performed using CGE server databases for antimicrobial resistance genes and sequence types. Virulence factors and CRISPR were analysed using PubMLST and	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY**	**PMID:**29269053 **Impact Factor:** 1.276 **H-Index:** 8

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	CRISPRFinder database respectively. RESULTS: The present study reports the whole genome shotgun sequences of eight N. meningitidis isolates from blood stream infections. The genome data revealed two novel sequence types ST12777 and ST12778, along with ST11, ST437 and ST6928. Virulence profile of the isolates matched with their sequence types. All isolates were negative for plasmid mediated resistance genes. CONCLUSIONS: To the best of our knowledge, this is the first report of ST11 and ST437N. meningitidis in India along with two novel sequence types ST12777 and ST12778. The study results indicate that the sequence types circulating in India are diverse and needs continuous monitoring. Further studies strengthening the genome data on N. meningitidis are required to understand the prevalence, spread, exact resistance and virulence mechanism along with serotypes.				
712.	Veeraraghavan, B., Pragasam, A. K., Manesh, A., Rupali, P., Iyadurai, R., Rodrigues, C., Joshi, S., Roy, I., Chaudhuri, B. N., Chitnis, D. S. and Tapan, D. Dosing strategy based on prevailing aminoglycoside minimum inhibitory concentration in India: Evidence and issues Indian J Med Microbiol; 2017, 35 (4): 585-587 Address: Department of Clinical Microbiology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Internal Medicine and Infectious Disease, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Microbiology, PD Hinduja Hospital and Medical Research Centre, Bengaluru, Karnataka, India. Department of Microbiology, Manipal Hospital, Bengaluru, Karnataka, India. Department of Microbiology, The Calcutta Medical Research Institute, Kolkata, West Bengal, India. Department of Microbiology, Fortis Hospital, Anandapur, Kolkata, West Bengal, India. Department of Microbiology and Immunology, Choithram Hospital, Indore, Madhya Pradesh, India. Department of Microbiology, Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, Uttar Pradesh, India. Aminoglycosides are important agents used for treating drug-resistant infections. The current dosing regimen of aminoglycosides does not achieve sufficient serum level concentration for the infected bacterial pathogen interpreted as susceptible based on laboratory testing. Minimum inhibitory concentration was determined for nearly 2000 isolates of Enterobacteriaceae and Pseudomonas aeruginosa by broth microdilution method. Results were interpreted based on CLSI and EUCAST interpretative criteria and the inconsistencies in the susceptibility profile were noted. This study provides insights into the	**NAT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY, MEDICINE**	**PMID:29405154** **Impact Factor:** 1.149 **H-Index:**38

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	inconsistencies existing in the laboratory interpretation and the corresponding clinical success rates. This urges the need for revising clinical breakpoints for amikacin, to resolve under dosing leading to clinical failure.				
713.	Veeraraghavan, B., Shankar, C., Karunasree, S., Kumari, S., Ravi, R. and Ralph, R. Carbapenem resistant Klebsiella pneumoniae isolated from bloodstream infection: Indian experience Pathog Glob Health; 2017, 111 (5): 240-246 **Address:** a Department of Clinical Microbiology, **Christian Medical College** , Vellore , India. b Department of Medicine , **Christian Medical College** , Vellore , India. Increased incidence of multidrug resistant (MDR) Gram negative infection has resulted in high rates of morbidity and mortality. Klebsiella pneumoniae is one of the commonest MDR pathogens causing bacteraemia with limited therapeutic options such as colistin and tigecycline. Present study focused on molecular characterisation of MDR K. pneumoniae from bloodstream infection and their clinical outcome. A total of 115 K. pneumoniae from January 2015 to September 2016 were included in the study which comprised of phenotypically identified ESBL and carbapenem resistant (CR) isolates. Multiplex PCR was performed for detection of resistance genes encoding beta-lactam resistance. This includes blaSHV, blaTEM, blaVEB, blaPER, blaCTX-M, blaDHA, blaCIT, blaFOX, blaACC, blaACT, blaNDM, blaOXA48-like, blaVIM and blaKPC. Co-expression of blaSHV, blaTEM and blaCTX-M was predominant with 64% (74/115) prevalence. CTX-M-1 was the variant produced by all the isolates producing CTX-M. AmpC was uncommon, seen in 5% of the isolates (6/115). Among the carbapenemases co-expression of blaNDM and blaOXA48-like was observed in 28% (32/115) and blaNDM in 19% (22/115) and blaOXA48-like in 13% (15/115). blaKPC was absent. Overall mortality was observed to be 57% (64/113) and mortality among CR K. pneumoniae (Kp) was 68% (50/73). The antibiotics that were administered for treatment of CRKp were colistin in 90% (66/73) and tigecycline in 7% (5/73) and in 99% combined with meropenem (72/73). Prevalence of community acquired and nosocomial infections were 5% (4/73) and 95% (69/73) respectively among CRKp. Minocycline and meropenem susceptibilities were comparable and hence minocycline can be a carbapenem sparing agent. The resistance to beta-lactam antibiotics is steadily increasing and are plasmid mediated, their containment in healthcare setting is a challenge.	**INT**	**JUL TO DEC**	**CLINICAL MICROBIOLOGY, MEDICINE**	**PMID:**28670975 **PMCID:**5560201 **Impact Factor:** 1.695 **H-Index:** 58

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
714.	Veerasubramanian, P. K., Kabeerdoss, J., Sandhya, P., Devasahayam, S. and Danda, D. Design and evaluation of cryodevice, an easy to use apparatus for maintenance of optimum temperature during cryoglobulin assay Int J Rheum Dis; 2017, **Address:** Department of Bioengineering, **Christian Medical College and Hospital, Vellore**, India. Department of Biotechnology, Indian Institute of Technology Madras, Chennai, India. Department of Rheumatology and Clinical Immunology, **Christian Medical College and Hospital, Vellore**, India. INTRODUCTION: Maintenance of temperature during collection and transport of blood is an important pre-requisite for cryoglobulin assays. In this manuscript, we describe 'cryodevice', a low-cost device for transportation and/or incubation of vials of whole blood at 37 degrees C. Such a device would reduce false negatives in cryoglobulin assays. METHOD: The 'cryodevice' takes the embodiment of a portable, light, insulated water bath, which can be used as an incubator in a plugged-in state, or as a transport container after it is set up and disconnected from the power supply. The design of the cryodevice is described here, with focus on its construction and electronic control circuit. Computer simulations and in vitro trials were performed to study the temperature drop in the blood samples placed in the device. Subsequently, the cryodevice was also used with actual patient blood samples. RESULTS: Thermal simulations and in vitro testing of the cryodevice predicted that the design would meet the temperature maintenance goals. When the cryodevice was put in to use for screening 45 patient blood samples, it helped identify positive cryoglobulinemia in three of the samples. CONCLUSION: The description of the cryodevice envisions enabling the construction of a low-cost device in resource-limited healthcare settings in India created with locally available resources. On testing, the device was found to be satisfactory in performance and is expected to bring down incidences of false negatives in cryoglobulin tests.	**INT**	**JUL TO DEC**	**RHEUMATOLOGY**	**PMID:**28891170 **Impact Factor:**2.624 **H-Index:** 27
715.	Velusamy, V., Premkumar, P. S. and Kang, G. Exclusive breastfeeding practices among mothers in urban slum settlements: pooled analysis from three prospective birth cohort studies in South India Int Breastfeed J; 2017, 12 35	**INT**	**JUL TO DEC**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28785298 **PMCID:**5540495 **Impact Factor:** 2.710

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences, **Christian Medical College, Vellore,** -632004 India.0000 0004 1767 8969grid.11586.3b BACKGROUND: The World Health Organization (WHO) recommends six months of exclusive breastfeeding. Despite documented health, social and economic benefits, the practice of exclusive breastfeeding is quite low and information on influencing factors is limited especially from slum settlements. Our goal is to assess the prevalence and evaluate factors associated with early cessation of exclusive breastfeeding in the first six months of life among mothers in urban slums of Vellore, Southern India. METHODS: We pooled data from three similar birth cohort studies (n = 1088) conducted between 2002 and 2009. Breastfeeding information was obtained soon after birth and then from follow-up home visits conducted once every two weeks by the field workers. Multivariable Cox regression analyses were used to assess factors associated with early cessation of exclusive breastfeeding. RESULTS: The prevalence of exclusive breastfeeding for the first six months was 11.4%, based on prospective data since birth. Results from multivariable analyses revealed maternal education (Adjusted Hazard Ratio [AHR] 1.18 , 95% CI 1.03, 1.35), pucca type of house (AHR 1.25 , 95% CI 1.10, 1.43), two or more number of children in the family (AHR 1.26 , 95% CI 1.10, 1.43), joint family structure (AHR 1.20 , 95% CI 1.02, 1.40) and birth during summer (AHR 1.16, 95% CI 1.01, 1.31) were associated with early cessation of exclusive breastfeeding in the first six months. CONCLUSIONS: Our results indicate that exclusive breastfeeding rates are well below the recommended levels. Educational interventions providing comprehensive breastfeeding information to mothers and their families can be evaluated to assess its effect on improving infant feeding practices.				**H-Index:** 27
716.	Venkatesh K(1), Reddy LVK(1), Abbas S(2), Mullick M(1), Moghal ETB(1), Balakrishna JP(3), Sen D(1). NOTCH Signaling Is Essential for Maturation, Self-Renewal, and Tri-Differentiation of In Vitro Derived Human Neural Stem Cells. Cell Reprogram. 2017 Dec;19(6):372-383. doi: 10.1089/cell.2017.0009. Epub 2017 Oct 16. **Author information:** (1)Cellular and Molecular Therapeutics Laboratory, Centre for Biomaterials, Cellular	**INT**	**JUL TO DEC**	**CENTRE FOR STEM CELL RESEARCH**	**PMID:**29035086 **WOS:**000417309800006 **Impact Factor:** 1.255 **H-Index:** 53

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	and Molecular Theranostics, Vellore Institute of Technology (VIT) University, Vellore, India. (2)Centre for Stem Cell Research, **Christian Medical College, Vellore,** India. (3)Stellixir Biotech Pvt. Ltd, Bangalore, India . Although neural stem cells (NSCs) have potential applications in treating neurological disorders, much still needs to be understood about the differentiation biology for their successful clinical translation. In this study, we aimed at deriving NSCs from human umbilical cord blood-derived mesenchymal em cells (hUCB-MSCs) and explored the role of Notch signaling in the differentiation process. The hUCB-MSCs were characterized as per guidelines of the International Society of Cellular Therapy. NSCs were successfully generated from hUCB-MSCs by using epidermal and fibroblast growth factors under serum-free conditions. The expression of NSC markers (Nestin and Musashi-1) in the neurospheres generated from hUCB-MSCs in the presence or absence of N-[N-(3,5-difluorophenacetyl)-l-alanyl]-S-phenylglycine t-butyl ester (DAPT; Notch inhibitor) was immuno-phenotypically characterized by using immunofluorescence. DAPT showed significant (*p < 0.05) downregulated expression of the NSC markers-Nestin and SOX2-at different time points (6 hours, 12 hours, 24 hours, 36 hours, and 5 days) post-treatment. In addition, Mushashi-1 (NSC marker) expression in NSCs was also inhibited after DAPT treatment, which signifies that the process is Notch dependent. These data were further correlated with formation of a reduced average number of neurospheres derived from hUCB-MSCs (2 colonies vs. 11 colonies/field of view) in the presence of DAPT compared with the control (without DAPT). The expression of Notch target genes in NSC cultures (Notch intracellular domain [NICD], HES1, and HES5) was also significantly downregulated after DAPT treatment. In the presence of DAPT, the markers for neuronal (MAP2, NEFH); and glial (GFAP, GLUL, and MBP) lineages were significantly downregulated as seen via immunofluorescence and quantitative polymerase chain reaction, indicating the role of Notch in the tri-differentiation mechanism of NSCs as well. In addition, Notch signaling inhibition induced higher cell death during the lineage commitment of NSCs as measured 3 days (16.9% vs. 8.9%) and 6 days (42.9% vs. 20.8%) postinduction. These results suggest that the efficient derivation of NSCs and their subsequent lineage commitment from hUCB-MSCs requires the Notch signaling pathway. DOI: 10.1089/cell.2017.0009				
717.	Venkatramani, V., Kumar, S., Chandrasingh, J., Devasia, A. and Kekre, N. S.	**NAT**	**JAN TO**	**UROLOGY**	**PMID:**28469302

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Perioperative complications and postoperative outcomes of partial nephrectomy for renal cell carcinoma: Does indication matter? Indian J Urol; 2017, 33 (2): 140-143 **Address:** Department of Urology, **Christian Medical College, Vellore,** Tamil Nadu, India. **INTRODUCTION:** The aim of the study was to determine whether perioperative complications and postoperative outcomes varied with the indication of partial nephrectomy (PN). **MATERIALS AND METHODS:** We reviewed data of 184 consecutive PN for suspected renal cell carcinoma operated between January 2004 and December 2013. Complications using the Clavien-Dindo classification were compared between surgeries for absolute indications (chronic renal failure, bilateral tumors, or solitary kidney), those for relative indications (comorbid illnesses with the potential to affect renal function) and elective indications (patients without risk factors). Complex tumors were defined as size >7 cm, multiple, hilar, and endophytic tumors. **RESULTS:** Patients with an absolute indication had larger tumors (P = 0.001) and tumors of a higher pathological T-stage (P = 0.03). Minor complications (Clavien 1 and 2) occurred in 25.4% patients in the elective arm versus over 40% in the other arms (P = 0.049). Major complications (Clavien 3+) were less common in the elective arm (3.2% cases vs. 12.7% in the relative arm and 13.8% in the absolute arm) with a trend to significance (P = 0.09). On multivariate analysis, absolute indication (odds ratio [OR] = 2.4, P = 0.04) and surgery for a complex renal mass (OR = 2.5 times, P = 0.03) remained significant predictors of minor complications. Major complications were more common in the relative (OR = 5.5, P = 0.057) and absolute indication arm (OR = 5.231, P = 0.051) with a trend toward significance. **CONCLUSIONS:** Elective indication was associated with fewer complications than PN for relative or absolute indications.		**JUN**		**Impact Factor:** 5.157 **H-Index:** 21
718.	Verghese, V. P. Introducing rubella vaccine into the national immunisation schedule Indian J Med Microbiol; 2017, 35 (1): 143-145 **Address:** Professor, Pediatric Infectious Diseases, Department of Paediatrics, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JAN TO JUN**	**PEDIATRIC INFECTIOUS DISEASES**	**PMID:**28303838 **Impact Factor:**1.149 **H-Index:** 38
719.	Verghese, V. P., Hendson, L., Singh, A., Guenette, T., Gratrix, J. and Robinson, J.	**INT**	**JUL TO**	**PEDIATRICS**	**PMID:**29189610

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	L. Early Childhood Neurodevelopmental Outcomes in Infants Exposed to Infectious Syphilis In Utero Pediatr Infect Dis J; 2017, **Address:** Department of Pediatrics, **Christian Medical College, Vellore,** India. Department of Pediatrics, University of Calgary, Calgary, AB. University of Alberta, Edmonton, Alberta. Alberta Health Services- Edmonton STI Clinic. Alberta Health Services- Centralized STI Services. BACKGROUND: There are minimal neurodevelopmental follow-up data for infants exposed to syphilis in-utero. METHODS: This is an inception cohort study of infants exposed to syphilis in utero. We reviewed women with reactive syphilis serology in pregnancy or at delivery in Edmonton (Canada), 2002 through 2010 and describe the neurodevelopmental outcomes of children with and without congenital syphilis. RESULTS: There were 39 births to women with reactive syphilis serology, 9 of whom had late latent syphilis (n=4), stillbirths (n=2) or early neonatal deaths (n=3), leaving 30 survivors of which 11 with and 7 without congenital syphilis had neurodevelopmental assessment. Those with congenital syphilis were all born to women with inadequate syphilis treatment prior to delivery. Neurodevelopmental impairment was documented in 3 of 11 (27%) infants with congenital syphilis and 1 of 7 (14%) without congenital syphilis with speech language delays in 4 of 11 (36%) with congenital syphilis and 3 of 7 (42%) without congenital syphilis. CONCLUSIONS: Infants born to mothers with reactive syphilis serology during pregnancy are at high risk for neurodevelopmental impairment, whether or not they have congenital syphilis, so should all be offered neurodevelopmental assessments and early referral for services as required.		**DEC**		**Impact Factor:**2.486 **H-Index:** 127
720.	Verghese, V. P., Veeraraghavan, B., Jayaraman, R., Varghese, R., Neeravi, A., Jayaraman, Y., Thomas, K. and Mehendale, S. M. Increasing incidence of penicillin- and cefotaxime-resistant Streptococcus pneumoniae causing meningitis in India: Time for revision of treatment guidelines? Indian J Med Microbiol; 2017, 35 (2): 228-236 **Address:** Department of Paediatrics, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Department of Clinical Microbiology, **Christian Medical College and Hospital,**	**INT**	**JUL TO DEC**	**PEDIATRICS, CLINICAL MICROBIOLOGY, GENERAL MEDICINE**	**PMID:**28681811 **WOS:**000405085400012 **Impact Factor:** 1.149 **H-Index:** 38

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Vellore, Tamil Nadu, India. National Institute of Epidemiology, ICMR, Chennai, Tamil Nadu, India. Department of General Medicine, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. PURPOSE: Pneumococcal meningitis is a life-threatening infection, requiring prompt diagnosis and effective treatment. Penicillin resistance in pneumococcal infections is a concern. Here, we present the antibiotic susceptibility profile of pneumococcal meningeal isolates from January 2008 to August 2016 to elucidate treatment guidelines for pneumococcal meningitis. MATERIALS AND METHODS: Invasive pneumococcal isolates from all age groups, were included in this study. Minimum inhibitory concentrations for the isolates were identified by agar dilution technique and VITEK System 2. Serotyping of isolates was done by co-agglutination technique. RESULTS: Out of 830 invasive pneumococcal isolates, 167 (20.1%) isolates were from meningeal infections. Cumulative penicillin resistance in pneumococcal meningitis was 43.7% and cefotaxime non-susceptibility was 14.9%. Penicillin resistance amongst meningeal isolates in those younger than 5 years, 5-16 years of age and those aged 16 years and older was 59.7%, 50% and 27.3%, respectively, with non-susceptibility to cefotaxime in the same age groups being 18%, 22.2% and 10.4%. Penicillin resistance amongst pneumococcal meningeal isolates increased from 9.5% in 2008 to 42.8% in 2016, whereas cefotaxime non-susceptibility increased from 4.7% in 2008 to 28.5% in 2016. Serotypes 14, 19F, 6B, 6A, 23F, 9V and 5 were the most common serotypes causing meningitis, with the first five accounting for over 75% of resistant isolates. CONCLUSIONS: The present study reports increasing penicillin resistance and cefotaxime non-susceptibility to pneumococcal meningitis in our setting. This highlights the need for empiric therapy with third-generation cephalosporins and vancomycin for all patients with meningitis while awaiting results of culture and susceptibility testing.				
721.	Verma, R., Chandy, S., Jayaprakash, N. S., Manoharan, A., Vijayalakshmi, M. A. and Venkataraman, K. Diagnostic potential of monoclonal antibodies developed against C-terminal polypeptide of P. falciparum Histidine Rich Protein2 (PfHRP2) in malaria infected patients from India Pathog Glob Health; 2017, 111 (6): 297-305	**INT**	**JUL TO DEC**	**MEDICINE UNIT I**	**PMID:**28777043 **PMC ID:**5694857 **WOS:**000414519100004 **Impact Factor:** 1.695 **H-Index:** 58

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Address: a Centre for BioSeparation Technology (CBST) , VIT University , Vellore , India. b Benjamin Pulimood Laboratory for Infection, Inflammation and Immunity (BMPLIII), Department of Medicine-1 , **Christian Medical College** (CMC) , Vellore , India. Malaria, caused by Plasmodium falciparum has become a major health burden in most tropical and developing countries. P. falciparum Histidine Rich Protein2 (PfHRP2), which exhibits polymorphism, is being widely used as a diagnostic marker. Recently, we reported the development of monoclonal antibodies against conserved C-terminal 105 amino acids of PfHRP2 for malaria diagnosis. Now, in this study, the diagnostic performance of two anti-C-terminal PfHRP2 mAbs (b10c1 and Aa3c10) were evaluated with 100 blood samples from clinically identified malaria patients from seven different geographical centers in India. Sandwich ELISA, polymerase chain reaction (PCR) and statistical tools were used for the evaluation of the performance of the anti-C-terminal PfHRP2 mAb. These mAbs detected P. falciparum (mean OD value 1.525 +/- 0.56) malaria with great accuracy with no cross reactivity with P. Plasmodium vivax (mean OD value 0.285 +/- 0.051) and normal healthy control samples (mean OD value 0.185 +/- 0.06) in Sandwich ELISA assay. The samples which were RDT negative for P. falciparum were also reactive in Sandwich ELISA with mean OD value of (1.303 +/- 0.532). The amount of PfHRP2 antigen in the patients' blood sample was quantified and categorized into three distinct groups having the HRP2 antigen in high, intermediate and low amounts. The presence of Pfhrp2 gene was also confirmed by PCR analysis. The sensitivity and specificity of the mAb were found to be 95 and 96% respectively. These data strongly suggest that the anti-C-terminal PfHRP2 mAbs b10c1 and Aa3c10 have merits for improvising the existing malarial diagnostics.				
722.	Verma, S., Thakur, P., Md, N. K., Cherian, K. E., Hephzibah, J. and Paul, T. V. VISUAL VIGNETTE Endocrine practice : official journal of the American College of Endocrinology and the American Association of Clinical Endocrinologists; 2017, 23 (8): 1032 **Address:** From: 1Department of Endocrinology, Diabetes & Metabolism, Vellore, India.☐Department of Nuclear Medicine; **Christian Medical College, Vellore,** India.	**INT**	**JAN TO JUN**	**ENDOCRINOLOGY**	**PMID:**28448758 **Impact Factor:** 2.347 **H-Index:** 68

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
723.	Vettiyil, G., Punnen, A. and Kumar, S. An Unusual Association of Chronic Recurrent Multifocal Osteomyelitis, Pyoderma Gangrenosum, and Takayasu Arteritis J Rheumatol; 2017, 44 (1): 127-128 **Address: Christian Medical College and Hospital** Vellore, Pediatric Unit II. **Christian Medical College and Hospital** Vellore, Child Health II, Assistant Professor, Department of Pediatrics. **Christian Medical College,** Paediatrics, Department of Pediatrics, **Christian Medical College, Vellore,** India. sathishkumar@cmcvellore.ac.in	**INT**	**JAN TO JUN**	**PEDIATRIC UNIT II**	**PMID:**28042129 **Impact Factor:**3.150 **H-Index:** 154
724.	Vig, T., Bindra, M. S., Kumar, R. M. and Alexander, S. Gastric Glomus Tumour Misdiagnosed as Gastric Carcinoid: An Unfamiliar Entity with Aids to Diagnosis and Review of Literature J Clin Diagn Res; 2017, 11 (5): ED32-ED33 **Address:** Assistant Professor, Department of Pathology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Associate Professor, Department of Pathology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Professor, Department of Nephrology, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India. Glomus tumour (GT) is a rare mesenchymal tumour of the stomach with Gastrointestinal Stromal Tumour (GIST), leiomyoma and schwannoma being far more common and comprising more than 90% of all gastric mesenchymal tumours. As glomus bodies are located in the peripheral parts of the human body, these tumours are peripherally located, classically the subungual region, hands, feet and trunk. While being evaluated for renal problems, a middle aged lady was incidentally found to have a gastric tumour. This was submucosal in location and was excised by a wedge resection and reported elsewhere as carcinoid tumour. The patient came to our hospital for further management. The biopsy was reviewed here and the modified diagnosis given was GT, confirmed by panel of immunohistochemistry. Two years after regular clinical follow up the patient is free of disease or any distant metastasis. In this paper the authors discuss the potential pitfalls, differential diagnoses and diagnostic clues that help in diagnosing this gastric tumour.	**INT**	**JAN TO JUN**	**PATHOLOGY,**	**PMID:**28658787 **Impact Factor:** 0.650 **H-Index:** 18

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
725.	Vijayakumar, L., Mohanraj, R., Kumar, S., Jeyaseelan, V., Sriram, S. and Shanmugam, M. CASP - An intervention by community volunteers to reduce suicidal behaviour among refugees Int J Soc Psychiatry; 2017, 63 (7): 589-597 **Address:** 1 Sneha, Chennai, India. 2 Voluntary Health Services (VHS), Chennai, India. 3 Samarth, Chennai, India. 4 Department of Biostatistics, **Christian Medical College, Vellore,** India. 5 Adventist Development Relief Agency (ADRA), Tiruchirappalli, India. BACKGROUND: Refugees are at risk of psychiatric morbidity because of forced migration, traumatic events and resettlement in unfamiliar environments. Many live in low- and middle-income countries (LAMIC) under stressful conditions contributing to increased suicide risk. AIMS: This study assessed the feasibility of regular contact and use of safety planning cards (CASP) by community volunteers (CVs) in reducing suicidal behaviour among Sri Lankan refugees residing in camps in Tamil Nadu, South India. METHODS: A household survey was carried out on consenting adults in two refugee camps - one intervention and one control - randomly selected using lottery method. The primary outcome was reduction in suicidal behaviour. Experience of trauma during war and migration, depression, post-traumatic stress and alcohol use were documented. Individuals scoring >16 on Centre for Epidemiological Studies Depression (CESD) or >30 on Post-traumatic Stress Disorder (PTSD) or with active/passive suicidal ideation or a history of previous suicidal attempts were considered as high risk. CVs were trained to deliver CASP intervention to high-risk individuals. Change from baseline to follow-up was computed for intervention and control groups, and the difference between changes in suicide rates was compared using proportion test. RESULTS: In total, 639 refugees from intervention and 664 from control camps participated. Of the 288 high-risk refugees in intervention camp, 139 completed the intervention. In the control camp, 187 were categorised as high risk. Prevalence of suicide attempts was 6.1%. Following intervention, differences between sites in changes in combined suicide (attempted suicides and suicides) rates per 100,000 per year were 519 (95% confidence interval (CI): 136-902; p < .01). CONCLUSION: CASP, an intervention involving contact by CVs and use of safety planning cards, is feasible to implement and can reduce suicidal behaviour among refugees. Its	**INT**	**JUL TO DEC**	**BIOSTATISTICS**	**PMID:**28776476 **Impact Factor:** 1.380 **H-Index:** 49

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	replication in more settings will enhance validity.				
726.	Vimal, M., Chacko, M. P., Basu, G. and Daniel, D. Correlation of Pretransplant Donor-specific Antibody Assay Using Luminex Crossmatch with Graft Outcome in Renal Transplant Patients Indian J Nephrol; 2017, 27 (5): 347-352 **Address:** Department of Pathology, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, Tamil Nadu, India. Department of Transfusion Medicine and Immunohaematology, **Christian Medical College, Vellore,** Tamil Nadu, India. Central Northern Adelaide Renal and Transplant Service, Royal Adelaide Hospital, Australia. The significance of pretransplant anti-human leukocyte antigen antibody levels that are detectable by more sensitive platforms (including the Luminex platform) yet undetected by complement-dependent cytotoxicity (CDC) assay remains unclear. The aim of this study was to determine the clinical significance of the donor-specific antibody (DSA) assay Luminex crossmatch and its impact on short-term renal graft outcome such as acute rejections, graft survival, and graft function. The results of pretransplant DSA-lymphocyte crossmatching (LCXM) assay in 126 renal allograft recipients whose CDCs crossmatches were negative were retrospectively analyzed for correlation with posttransplant outcomes. Of the 126 recipients, 32 (25.4%) had pretransplant DSA positive. Statistically significant association was found between DSA-LCXM positivity with 14(th) day estimated glomerular filtration rate (eGFR) (P = 0.05), DSA Class I with 3(rd) (P = 0.014) and 6(th) month (P = 0.02) eGFR, DSA Class II with 14(th) day (P = 0.06) and 1(st) month (P = 0.10) eGFR, mean fluorescent intensity (MFI) DSA with 7(th) day (P = 0.08) and 14(th) day (P = 0.09) eGFR, and maximum MFI DSA with 7(th) day eGFR (P = 0.09). The posttransplant eGFR was higher at various time intervals in DSA-LCXM-negative patients as compared to DSA-positive patients. However, pretransplant DSA-LCXM results did not predict the rejection episodes, graft loss, and 1-year posttransplant 24 h urine protein. Pretransplant DSA detected by LCXM in patients with a negative CDC does not predict adverse short-term outcomes. However, the difference in posttransplant eGFR supports further investigation in long-term effects.	**NAT**	**JUL TO DEC**	**TRANSFUSION MEDICINE AND IMMUNOHAEMATOLOGY**	**PMID:**28904429 **PMCID:**5590410 **Impact Factor:** 2.153 **H-Index:** 14
727.	Vinod, E., Boopalan, Prjvc and Sathishkumar, S. Reserve or Resident Progenitors in Cartilage? Comparative Analysis of	**INT**	**JUL TO DEC**	**PHYSIOLOGY, ORTHOPAEDI**	**PMID:**29047310 **Impact**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Chondrocytes versus Chondroprogenitors and Their Role in Cartilage Repair Cartilage; 2017, 1947603517736108 **Address:** 1 Department of Physiology, **Christian Medical College, Vellore,** India. 2 Department of Orthopaedics, **Christian Medical College**/Center for Stem Cell Research, Vellore, India. Introduction Articular cartilage is made up of hyaline tissue embodying chondrocytes, which arise from mesenchymal stromal cells (MSCs) and specialized extracellular matrix. Despite possessing resident progenitors in and around the joint primed for chondrogenesis, cartilage has limited intrinsic capacity of repair and cell turnover. Advances in isolation, culture, and characterization of these progenitors have raised the possibility for their use in cell-based cartilage repair. Chondroprogenitors (CPCs) have been classified as MSCs and have been postulated to play a vital role in injury response and are identified by their colony forming ability, proliferative potential, telomere dynamics, multipotency, and expression of stem cell markers. The combined presence of CPCs and chondrocytes within the same tissue compartments and the ability of chondrocytes to dedifferentiate and acquire stemness during culture expansion has obscured our ability to define and provide clear-cut differences between these 2 cell populations. Objective This review aims to evaluate and summarize the available literature on CPCs in terms of their origin, growth kinetics, molecular characteristics, and differential and therapeutic potential with emphasis on their difference from daughter chondrocytes. Design For this systematic review, a comprehensive electronic search was performed on PubMed and Google Scholar using relevant terms such as chondrocytes, chondroprogenitors, and surface marker expression. Results and Conclusion Our comparative analysis shows that there is an ill-defined distinction between CPCs and chondrocytes with respect to their cell surface expression (MSC markers and CPC-specific markers) and differentiation potential. Accumulating evidence indicates that the 2 subpopulations may be distinguished based on their growth kinetics and chondrogenic marker.			**CS**	**Factor:**2.000 **H-Index:** 19
728.	Viswanathan, Vijay, Bajaj, Sarita, Kalra, Sanjay, Aggarwal, Sameer, Atreja, Atulya, Chaudhry, Dhruva, Christopher, D. J., Das, A. K., Ghosh, Sujoy, Jacob, Jubbin, Kapur, Anil, Kumar, M. V. Ajay, Kumpatla, Satyavani, Madhu, S. V., Makkar, B. M., Ranabir, Salam, Sahay, Rakesh, Thomas, P. K., Tiwaskar, Mangesh, Tripathy, Srikanth, Udwadia, Zarir, Virdi, Sunny and Wilson, Nevin	**INT**	**JUL TO DEC**	**PULMONARY MEDICINE**	**NO PMID** **WOS:**000414339400002 **Impact Factor:**0.366

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	RSSDI clinical practice recommendations for diagnosis, prevention, and control of the diabetes mellitus-tuberculosis double burden International Journal of Diabetes in Developing Countries; 2017, 37 (4): 379-399				**H-Index:** 20
729.	Vivian Thangaraj, J. W., Mittal, M., Verghese, V. P., Kumar, C. P. G., Rose, W., Sabarinathan, R., Pandey, A. K., Gupta, N. and Murhekar, M. Scrub Typhus as an Etiology of Acute Febrile Illness in Gorakhpur, Uttar Pradesh, India, 2016 Am J Trop Med Hyg; 2017, 97 (5): 1313-1315 **Address:** National Institute of Epidemiology, Chennai, India. Department of Pediatrics, BRD Medical College, Gorakhpur, India. Pediatric Infectious Diseases, **Christian Medical College, Vellore,** India. National Institute of Virology, Gorakhpur Unit, Gorakhpur, India. Division of Epidemiology and Communicable Diseases, Indian Council of Medical Research, Delhi, India. Seasonal outbreaks of acute encephalitis syndrome (AES) with high mortality occur every year in Gorakhpur region of Uttar Pradesh, India. Earlier studies indicated the role of scrub typhus as the important etiology of AES in the region. AES cases were hospitalized late in the course of their illness. We established surveillance for acute febrile illness (AFI) (fever >/= 4 days duration) in peripheral health facilities in Gorakhpur district to understand the relative contribution of scrub typhus. Of the 224 patients enrolled during the 3-month period corresponding to the peak of AES cases in the region, about one-fifth had immunoglobulin M (IgM) antibodies against Orientia tsutsugamushi. Dengue and leptospira accounted for 8% and 3% of febrile illness cases. Treating patients with AFI attending the peripheral health facilities with doxycycline could prevent development of AES and thereby reduce deaths due to AES in Gorakhpur region.	**INT**	**JUL TO DEC**	**PEDIATRIC INFECTIOUS DISEASES**	**PMID:**28820712 **Impact Factor:** 2.549 **H-Index:** 126
730.	Vos, Theo, Abajobir, Amanuel Alemu, Abbafati, Cristiana, Abbas, Kaja M., Abate, Kalkidan Hassen, Abd-Allah, Foad, Abdulle, Abdishakur M., Abebo, Teshome Abuka, Abera, Semaw Ferede, Aboyans, Victor, Abu-Raddad, Laith J., Ackerman, Ilana N., Adamu, Abdu Abdullahi, Adetokunboh, Olatunji, Afarideh, Mohsen, Afshin, Ashkan, Agarwal, Sanjay Kumar, Aggarwal, Rakesh, Agrawal, Anurag, Agrawal, Sutapa, Kiadaliri, Aliasghar Ahmad, Ahmadieh, Hamid, Ahmed, Muktar Beshir, Aichour, Amani Nidhal, Aichour, Ibtihel, Aichour, Miloud Taki Eddine, Aiyar, Sneha, Akinyemi, Rufus Olusola, Akseer, Nadia, Al Lami, Faris Hasan, Alahdab, Fares, Al-	**INT**	**JUL TO DEC**	**PULMONARY MEDICINE**	**PMID:**28919117 **PMCID:** **PMC**5605509 **WOS:**000410630000004 **Impact Factor:** 47.831 **H-Index:** 646

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Aly, Ziyad, Alam, Khurshid, Alam, Noore, Alam, Tahiya, Alasfoor, Deena, Alene, Kefyalew Addis, Ali, Raghib, Alizadeh-Navaei, Reza, Alkerwi, Ala'a, Alla, Francois, Allebeck, Peter, Allen, Christine, Al-Maskari, Fatma, Al-Raddadi, Rajaa, Alsharif, Ubai, Alsowaidi, Shirina, Altirkawi, Khalid A., Amare, Azmeraw T., Amini, Erfan, Ammar, Walid, Amoako, Yaw Ampem, Andersen, Hjalte H., Antonio, Carl Abelardo T., Anwari, Palwasha, Arnlov, Johan, Artaman, Al, Aryal, Krishna Kumar, Asayesh, Hamid, Asgedom, Solomon W., Assadi, Reza, Atey, Tesfay Mehari, Atnafu, Niguse Tadele, Atre, Sachin R., Avila-Burgos, Leticia, Avokpaho, Euripide Frinel G. Arthur, Awasthi, Ashish, Ayala Quintanilla, Beatriz Paulina, Saleem, Huda Omer Ba, Bacha, Umar, Badawi, Alaa, Balakrishnan, Kalpana, Banerjee, Amitava, Bannick, Marlena S., Barac, Aleksandra, Barber, Ryan M., Barker-Collo, Suzanne L., Baernighausen, Till, Barquera, Simon, Barregard, Lars, Barrero, Lope H., Basu, Sanjay, Battista, Bob, Battle, Katherine E., Baune, Bernhard T., Bazargan-Hejazi, Shahrzad, Beardsley, Justin, Bedi, Neeraj, Beghi, Ettore, Bejot, Yannick, Bekele, Bayu Begashaw, Bell, Michelle L., Bennett, Derrick A., Bensenor, Isabela M., Benson, Jennifer, Berhane, Adugnaw, Berhe, Derbew Fikadu, Bernabe, Eduardo, Betsu, Balem Demtsu, Beuran, Mircea, Beyene, Addisu Shunu, Bhala, Neeraj, Bhansali, Anil, Bhatt, Samir, Bhutta, Zulfiqar A., Biadgilign, Sibhatu, Bienhoff, Kelly, Bikbov, Boris, Birungi, Charles, Biryukov, Stan, Bisanzio, Donal, Bizuayehu, Habtamu Mellie, Boneya, Dube Jara, Boufous, Soufiane, Bourne, Rupert R. A., Brazinova, Alexandra, Brugha, Traolach S., Buchbinder, Rachelle, Bulto, Lemma Negesa Bulto, Bumgarner, Blair R., Butt, Zahid A., Cahuana-Hurtado, Lucero, Cameron, Ewan, Car, Mate, Carabin, Helene, Carapetis, Jonathan R., Cardenas, Rosario, Carpenter, David O., Carrero, Juan Jesus, Carter, Austin, Carvalho, Felix, Casey, Daniel C., Caso, Valeria, Castaneda-Orjuela, Carlos A., Castle, Chris D., Catala-Lopez, Ferran, Chang, Hsing-Yi, Chang, Jung-Chen, Charlson, Fiona J., Chen, Honglei, Chibalabala, Mirriam, Chibueze, Chioma Ezinne, Chisumpa, Vesper Hichilombwe, Chitheer, Abdulaal A., **Christopher, Devasahayam Jesudas,** Ciobanu, Liliana G., Cirillo, Massimo, Colombara, Danny, Cooper, Cyrus, Cortesi, Paolo Angelo, Criqui, Michael H., Crump, John A., Dadi, Abel Fekadu, Dalal, Koustuv, Dandona, Lalit, Dandona, Rakhi, Das Neves, Jose, Davitoiu, Dragos V., De Courten, Barbora, De Leo, Diego, Degenhardt, Louisa, Deiparine, Selina, Dellavalle, Robert P., Deribe, Kebede, Des Jarlais, Don C., Dey, Subhojit, Dharmaratne, Samath D., Dhillon, Preet Kaur, Dicker, Daniel, Ding, Eric L., Djalalinia, Shirin, Huyen Phuc, Do, Dorsey, E. Ray, Bender Dos Santos, Kadine Priscila, Douwes-Schultz, Dirk, Doyle, Kerrie E., Driscoll, Tim R., Dubey, Manisha, Duncan, Bruce Bartholow, El-Khatib, Ziad Ziad, Ellerstrand, Jerisha, Enayati, Ahmadali, Endries, Aman Yesuf, Ermakov,				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Sergey Petrovich, Erskine, Holly E., Eshrati, Babak, Eskandarieh, Sharareh, Esteghamati, Alireza, Estep, Kara, Fanuel, Fanuel Belayneh Bekele, Sa Farinha, Carla Sofia E, Faro, Andre, Farzadfar, Farshad, Fazeli, Mir Sohail, Feigin, Valery L., Fereshtehnejad, Seyed-Mohammad, Fernandes, Joao C., Ferrari, Alize J., Feyissa, Tesfaye Regassa, Filip, Irina, Fischer, Florian, Fitzmaurice, Christina, Flaxman, Abraham D., Flor, Luisa Sorio, Foigt, Nataliya, Foreman, Kyle J., Franklin, Richard C., Fullman, Nancy, Furst, Thomas, Furtado, Joao M., Futran, Neal D., Gakidou, Emmanuela, Ganji, Morsaleh, Garcia-Basteiro, Alberto L., Gebre, Teshome, Gebrehiwot, Tsegaye Tewelde, Geleto, Ayele, Gemechu, Bikila Lencha, Gesesew, Hailay Abrha, Gething, Peter W., Ghajar, Alireza, Gibney, Katherine B., Gill, Paramjit Singh, Gillum, Richard F., Ginawi, Ibrahim Abdelmageem Mohamed, Giref, Ababi Zergay, Gishu, Melkamu Dedefo, Giussani, Giorgia, Godwin, William W., Gold, Audra L., Goldberg, Ellen M., Gona, Philimon N., Goodridge, Amador, Gopalani, Sameer Vali, Goto, Atsushi, Goulart, Alessandra Carvalho, Griswold, Max, Gugnani, Harish Chander, Gupta, Rahul, Gupta, Rajeev, Gupta, Tanush, Gupta, Vipin, Hafezi-Nejad, Nima, Hailu, Alemayehu Desalegne, Hailu, Gessessew Bugssa, Hamadeh, Randah Ribhi, Hamidi, Samer, Handal, Alexis J., Hankey, Graeme J., Hao, Yuantao, Harb, Hilda L., Hareri, Habtamu Abera, Maria Haro, Josep, Harvey, James, Hassanvand, Mohammad Sadegh, Havmoeller, Rasmus, Hawley, Caitlin, Hay, Roderick J., Hay, Simon I., Henry, Nathaniel J., Beatriz Heredia-Pi, Ileana, Heydarpour, Pouria, Hoek, Hans W., Hoffman, Howard J., Horita, Nobuyuki, Hosgood, H. Dean, Hostiuc, Sorin, Hotez, Peter J., Hoy, Damian G., Htet, Aung Soe, Hu, Guoqing, Huang, Hsiang, Huynh, Chantal, Iburg, Kim Moesgaard, Igumbor, Ehimario Uche, Ikeda, Chad, Irvine, Caleb Mackay Salpeter, Jacobsen, Kathryn H., Jahanmehr, Nader, Jakovljevic, Mihajlo B., Jassal, Simerjot K., Javanbakht, Mehdi, Jayaraman, Sudha P., Jeemon, Panniyammakal, Jensen, Paul N., Jha, Vivekanand, Jiang, Guohong, John, Denny, Johnson, Catherine O., Johnson, Sarah Charlotte, Jonas, Jost B., Jurisson, Mikk, Kabir, Zubair, Kadel, Rajendra, Kahsay, Amaha, Kamal, Ritul, Kan, Haidong, Karam, Nadim E., Karch, Andre, Karema, Corine Kakizi, Kasaeian, Amir, Kassa, Getachew Mullu, Kassaw, Nigussie Assefa, Kassebaum, Nicholas J., Kastor, Anshul, Katikireddi, Srinivasa Vittal, Kaul, Anil, Kawakami, Norito, Keiyoro, Peter Njenga, Kengne, Andre Pascal, Keren, Andre, Khader, Yousef Saleh, Khalil, Ibrahim A., Khan, Ejaz Ahmad, Khang, Young-Ho, Khosravi, Ardeshir, Khubchandani, Jagdish, Kieling, Christian, Kim, Daniel, Kim, Pauline, Kim, Yun Jin, Kimokoti, Ruth W., Kinfu, Yohannes, Kisa, Adnan, Kissimova-Skarbek, Katarzyna A., Kivimaki, Mika, Knudsen, Ann Kristin, Kokubo, Yoshihiro, Kolte, Dhaval, Kopec, Jacek A., Kosen, Soewarta, Koul, Parvaiz				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	A., Koyanagi, Ai, Kravchenko, Michael, Krishnaswami, Sanjay, Krohn, Kristopher J., Defo, Barthelemy Kuate, Bicer, Burcu Kucuk, Kumar, G. Anil, Kumar, Pushpendra, Kumar, Sanjiv, Kyu, Hmwe H., Lal, Dharmesh Kumar, Lalloo, Ratilal, Lambert, Nkurunziza, Lan, Qing, Larsson, Anders, Lavados, Pablo M., Leasher, Janet L., Lee, Jong-Tae, Lee, Paul H., Leigh, James, Leshargie, Cheru Tesema, Leung, Janni, Leung, Ricky, Levi, Miriam, Li, Yichong, Li, Yongmei, Li Kappe, Darya, Liang, Xiaofeng, Liben, Misgan Legesse, Lim, Stephen S., Linn, Shai, Liu, Angela, Liu, Patrick Y., Liu, Shiwei, Liu, Yang, Lodha, Rakesh, Logroscino, Giancarlo, London, Stephanie J., Looker, Katharine J., Lopez, Alan D., Lorkowski, Stefan, Lotufo, Paulo A., Low, Nicola, Lozano, Rafael, Lucas, Timothy C. D., Macarayan, Erlyn Rachelle King, Abd El Razek, Hassan Magdy, Abd El Razek, Mohammed Magdy, Mahdavi, Mahdi, Majdan, Marek, Majdzadeh, Reza, Majeed, Azeem, Malekzadeh, Reza, Malhotra, Rajesh, Malta, Deborah Carvalho, Mamun, Abdullah A., Manguerra, Helena, Manhertz, Treh, Mantilla, Ana, Mantovani, Lorenzo G., Mapoma, Chabila C., Marczak, Laurie B., Martinez-Raga, Jose, Martins-Melo, Francisco Rogerlandio, Martopullo, Ira, Maerz, Winfried, Mathur, Manu Raj, Mazidi, Mohsen, Mcalinden, Colm, Mcgaughey, Madeline, Mcgrath, John J., Mckee, Martin, Mcnellan, Claire, Mehata, Suresh, Mehndiratta, Man Mohan, Mekonnen, Tefera Chane, Memiah, Peter, Memish, Ziad A., Mendoza, Walter, Mengistie, Mubarek Abera, Mengistu, Desalegn Tadese, Mensah, George A., Meretoja, Atte, Meretoja, Tuomo J., Mezgebe, Haftay Berhane, Micha, Renata, Millear, Anoushka, Miller, Ted R., Mills, Edward J., Mirarefin, Mojde, Mirrakhimov, Erkin M., Misganaw, Awoke, Mishra, Shiva Raj, Mitchell, Philip B., Mohammad, Karzan Abdulmuhsin, Mohammadi, Alireza, Mohammed, Kedir Endris, Mohammed, Shafiu, Mohanty, Sanjay K., Mokdad, Ali H., Mollenkopf, Sarah K., Monasta, Lorenzo, Montanez Hernandez, Julio, Montico, Marcella, Moradi-Lakeh, Maziar, Moraga, Paula, Mori, Rintaro, Morozoff, Chloe, Morrison, Shane D., Moses, Mark, Mountjoy-Venning, Cliff, Mruts, Kalayu Birhane, Mueller, Ulrich O., Muller, Kate, Murdoch, Michele E., Murthy, Gudlavalleti Venkata Satyanarayana, Musa, Kamarul Imran, Nachega, Jean B., Nagel, Gabriele, Naghavi, Mohsen, Naheed, Aliya, Naidoo, Kovin S., Naldi, Luigi, Nangia, Vinay, Natarajan, Gopalakrishnan, Negasa, Dumessa Edessa, Negoi, Ionut, Negoi, Ruxandra Irina, Newton, Charles R., Ngunjiri, Josephine Wanjiku, Cuong Tat, Nguyen, Nguyen, Grant, Nguyen, Minh, Quyen Le, Nguyen, Trang Huyen, Nguyen, Nichols, Emma, Ningrum, Dina Nur Anggraini, Nolte, Sandra, Vuong Minh, Nong, Norrving, Bo, Noubiap, Jean Jacques N., O'donnell, Martin J., Ogbo, Felix Akpojene, Oh, In-Hwan, Okoro, Anselm, Oladimeji, Olanrewaju, Olagunju, Andrew Toyin, Olagunju, Tinuke Oluwasefunmi, Olsen, Helen E., Olusanya, Bolajoko				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Olubukunola, Olusanya, Jacob Olusegun, Ong, Kanyin, Opio, John Nelson, Oren, Eyal, Ortiz, Alberto, Osgood-Zimmerman, Aaron, Osman, Majdi, Owolabi, Mayowa O., Mahesh, P. A., Pacella, Rosana E., Pana, Adrian, Panda, Basant Kumar, Papachristou, Christina, Park, Eun-Kee, Parry, Charles D., Parsaeian, Mahboubeh, Patten, Scott B., Patton, George C., Paulson, Katherine, Pearce, Neil, Pereira, David M., Perico, Norberto, Pesudovs, Konrad, Peterson, Carrie Beth, Petzold, Max, Phillips, Michael Robert, Pigott, David M., Pillay, Julian David, Pinho, Christine, Plass, Dietrich, Pletcher, Martin A., Popova, Svetlana, Poulton, Richie G., Pourmalek, Farshad, Prabhakaran, Dorairaj, Prasad, Narayan, Prasad, Noela M., Purcell, Carrie, Qorbani, Mostafa, Quansah, Reginald, Rabiee, Rynaz H. S., Radfar, Amir, Rafay, Anwar, Rahimi, Kazem, Rahimi-Movaghar, Afarin, Rahimi-Movaghar, Vafa, Rahman, Mahfuzar, Rahman, Mohammad Hifz Ur, Rai, Rajesh Kumar, Rajsic, Sasa, Ram, Usha, Ranabhat, Chhabi Lal, Rankin, Zane, Rao, Paturi Vishnupriya, Rao, Puja C., Rawaf, Salman, Ray, Sarah E., Reiner, Robert C., Reinig, Nikolas, Reitsma, Marissa B., Remuzzi, Giuseppe, Renzaho, Andre M. N., Resnikoff, Serge, Rezaei, Satar, Ribeiro, Antonio L., Ronfani, Luca, Roshandel, Gholamreza, Roth, Gregory A., Roy, Ambuj, Rubagotti, Enrico, Ruhago, George Mugambage, Saadat, Soheil, Sadat, Nafis, Safdarian, Mahdi, Safi, Sare, Safiri, Saeid, Sagar, Rajesh, Sahathevan, Ramesh, Salama, Joseph, Salomon, Joshua A., Salvi, Sundeep Santosh, Samy, Abdallah M., Sanabria, Juan R., Santomauro, Damian, Santos, Itamar S., Santos, Joao Vasco, Milicevic, Milena M. Santric, Sartorius, Benn, Satpathy, Maheswar, Sawhney, Monika, Saxena, Sonia, Schmidt, Maria Ines, Schneider, Ione J. C., Schoettker, Ben, Schwebel, David C., Schwendicke, Falk, Seedat, Soraya, Sepanlou, Sadaf G., Servan-Mori, Edson E., Setegn, Tesfaye, Shackelford, Katya Anne, Shaheen, Amira, Shaikh, Masood Ali, Shamsipour, Mansour, Islam, Sheikh Mohammed Shariful, Sharma, Jayendra, Sharma, Rajesh, She, Jun, Shi, Peilin, Shields, Chloe, Shigematsu, Mika, Shinohara, Yukito, Shiri, Rahman, Shirkoohi, Reza, Shirude, Shreya, Shishani, Kawkab, Shrime, Mark G., Sibai, Abla Mehio, Sigfusdottir, Inga Dora, Santos Silva, Diego Augusto, Silva, Joao Pedro, Alves Silveira, Dayane Gabriele, Singh, Jasvinder A., Singh, Narinder Pal, Sinha, Dhirendra Narain, Skiadaresi, Eirini, Skirbekk, Vegard, Slepak, Erica Leigh, Sligar, Amber, Smith, David L., Smith, Mari, Sobaih, Badr H. A., Sobngwi, Eugene, Sorensen, Reed J. D., Moraes Sousa, Tatiane Cristina, Sposato, Luciano A., Sreeramareddy, Chandrashekhar T., Srinivasan, Vinay, Stanaway, Jeffrey D., Stathopoulou, Vasiliki, Steel, Nicholas, Stein, Dan J., Stein, Murray B., Steiner, Caitlyn, Steiner, Timothy J., Steinke, Sabine, Stokes, Mark Andrew, Stovner, Lars Jacob, Strub, Bryan, Subart, Michelle, Sufiyan, Muawiyyah Babale, Abdulkader,				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Rizwan Suliankatchi, Sunguya, Bruno F., Sur, Patrick J., Swaminathan, Soumya, Sykes, Bryan L., Sylte, Dillon O., Tabares-Seisdedos, Rafael, Taffere, Getachew Redae, Takala, Jukka S., Tandon, Nikhil, Tavakkoli, Mohammad, Taveira, Nuno, Taylor, Hugh R., Tehrani-Banihashemi, Arash, Tekelab, Tesfalidet, Shifa, Girma Temam, Terkawi, Abdullah Sulieman, Tesfaye, Dawit Jember, Tesssema, Belay, Thamsuwan, Ornwipa, Thomas, Katie E., Thrift, Amanda G., Tiruye, Tenaw Yimer, Tobe-Gai, Ruoyan, Tollanes, Mette C., Tonelli, Marcello, Topor-Madry, Roman, Tortajada, Miguel, Touvier, Mathilde, Bach Xuan, Tran, Tripathi, Suryakant, Troeger, Christopher, Truelsen, Thomas, Tsoi, Derrick, Tuem, Kald Beshir, Tuzcu, Emin Murat, Tyrovolas, Stefanos, Ukwaja, Kingsley N., Undurraga, Eduardo A., Uneke, Chigozie Jesse, Updike, Rachel, Uthman, Olalekan A., Uzochukwu, Benjamin S. Chudi, Van Boven, Job F. M., Varughese, Santosh, Vasankari, Tommi, Venkatesh, S., Venketasubramanian, Narayanaswamy, Vidavalur, Ramesh, Violante, Francesco S., Vladimirov, Sergey K., Vlassov, Vasiliy Victorovich, Vollset, Stein Emil, Wadilo, Fiseha, Wakayo, Tolassa, Wang, Yuan-Pang, Weaver, Marcia, Weichenthal, Scott, Weiderpass, Elisabete, Weintraub, Robert G., Werdecker, Andrea, Westerman, Ronny, Whiteford, Harvey A., Wijeratne, Tissa, Wiysonge, Charles Shey, Wolfe, Charles D. A., Woodbrook, Rachel, Woolf, Anthony D., Workicho, Abdulhalik, Hanson, Sarah Wulf, Xavier, Denis, Xu, Gelin, Yadgir, Simon, Yaghoubi, Mohsen, Yakob, Bereket, Yan, Lijing L., Yano, Yuichiro, Ye, Pengpeng, Yimam, Hassen Hamid, Yip, Paul, Yonemoto, Naohiro, Yoon, Seok-Jun, Yotebieng, Marcel, Younis, Mustafa Z., Zaidi, Zoubida, Zaki, Maysaa El Sayed, Zegeye, Elias Asfaw, Zenebe, Zerihun Menlkalew, Zhang, Xueying, Zhou, Maigeng, Zipkin, Ben, Zodpey, Sanjay, Zuhlke, Liesl Joanna, Murray, Christopher J. L. and Prev, G. B. D. Dis Injury Incidence Global, regional, and national incidence, prevalence, and years lived with disability for 328 diseases and injuries for 195 countries, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016 Lancet; 2017, 390 (10100): 1211-1259 Background As mortality rates decline, life expectancy increases, and populations age, non-fatal outcomes of diseases and injuries are becoming a larger component of the global burden of disease. The Global Burden of Diseases, Injuries, and Risk Factors Study 2016 (GBD 2016) provides a comprehensive assessment of prevalence, incidence, and years lived with disability (YLDs) for 328 causes in 195 countries and territories from 1990 to 2016. Methods We estimated prevalence and				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	incidence for 328 diseases and injuries and 2982 sequelae, their non-fatal consequences. We used DisMod-MR 2.1, a Bayesian meta-regression tool, as the main method of estimation, ensuring consistency between incidence, prevalence, remission, and cause of death rates for each condition. For some causes, we used alternative modelling strategies if incidence or prevalence needed to be derived from other data. YLDs were estimated as the product of prevalence and a disability weight for all mutually exclusive sequelae, corrected for comorbidity and aggregated to cause level. We updated the Socio-demographic Index (SDI), a summary indicator of income per capita, years of schooling, and total fertility rate. GBD 2016 complies with the Guidelines for Accurate and Transparent Health Estimates Reporting (GATHER). Findings Globally, low back pain, migraine, age-related and other hearing loss, iron-deficiency anaemia, and major depressive disorder were the five leading causes of YLDs in 2016, contributing 57.6 million (95% uncertainty interval [UI] 40.8-75.9 million [7.2%, 6.0-8.3]), 45.1 million (29.0-62.8 million [5.6%, 4.0-7.2]), 36.3 million (25.3-50.9 million [4.5%, 3.8-5.3]), 34.7 million (23.0-49.6 million [4.3%, 3.5-5.2]), and 34.1 million (23.5-46.0 million [4.2%, 3.2-5.3]) of total YLDs, respectively. Age-standardised rates of YLDs for all causes combined decreased between 1990 and 2016 by 2.7% (95% UI 2.3-3.1). Despite mostly stagnant age-standardised rates, the absolute number of YLDs from non-communicable diseases has been growing rapidly across all SDI quintiles, partly because of population growth, but also the ageing of populations. The largest absolute increases in total numbers of YLDs globally were between the ages of 40 and 69 years. Age-standardised YLD rates for all conditions combined were 10.4% (95% UI 9.0-11.8) higher in women than in men. Iron-deficiency anaemia, migraine, Alzheimer's disease and other dementias, major depressive disorder, anxiety, and all musculoskeletal disorders apart from gout were the main conditions contributing to higher YLD rates in women. Men had higher age-standardised rates of substance use disorders, diabetes, cardiovascular diseases, cancers, and all injuries apart from sexual violence. Globally, we noted much less geographical variation in disability than has been documented for premature mortality. In 2016, there was a less than two times difference in age-standardised YLD rates for all causes between the location with the lowest rate (China, 9201 YLDs per 100 000, 95% UI 6862-11943) and highest rate (Yemen, 14 774 YLDs per 100 000, 11 018-19 228). Interpretation The decrease in death rates since 1990 for most causes has not been matched by a similar decline in age-standardised YLD rates. For many large causes, YLD rates have either been stagnant or have increased for some causes, such as diabetes. As populations are				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	ageing, and the prevalence of disabling disease generally increases steeply with age, health systems will face increasing demand for services that are generally costlier than the interventions that have led to declines in mortality in childhood or for the major causes of mortality in adults. Up-todate information about the trends of disease and how this varies between countries is essential to plan for an adequate health-system response. Copyright © 2017 The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY 4.0 license. Published by Elsevier Ltd.. All rights reserved. DOI: 10.1016/S0140-6736(17)32154-2				
731.	Vyas, R., Zachariah, A., Swamidasan, I., Doris, P. and Harris, I. Evaluation of a distance learning academic support program for medical graduates during rural hospital service in India Educ Health (Abingdon); 2017, 30 (3): 240-243 Address: Foundation for Advancement of International Medical Education and Research, Philadelphia, PA, USA. Department of Medicine, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Medicine, Ida Scudder School, Vellore, Tamil Nadu, India. Department of Medicine, Madras School of Social Work, Chennai, Tamil Nadu, India. Department of Medical Education, University of Illinois at Chicago College of Medicine, Chicago, IL, USA. Background: Christian Medical College (CMC), Vellore, India, a tertiary care hospital, designed a year-long Fellowship in Secondary Hospital Medicine (FSHM) for CMC graduates, with the aim to support them during rural service and be motivated to consider practicing in these hospitals. The FSHM was a blend of 15 paper-based distance learning modules, 3 contact sessions, community project work, and networking. This paper reports on the evaluation of the FSHM program. Methods: The curriculum development process for the FSHM reflected the six-step approach including problem identification, needs assessment, formulating objectives, selecting educational strategies, implementation, and evaluation. Telephone interviews with students were conducted to determine if the program motivated them to consider working in smaller hospitals. Results: Qualitative data analysis showed that the program motivated the FSHM students to consider practicing in secondary hospitals by creating awareness of challenging opportunities and instilling confidence to provide good quality clinical care with limited resources. Discussion: We propose rural service for MBBS graduates, supported by a blend of on-site and distance education as a model for medical education.	**INT**	**JAN TO JUN**	**MEDICINE**	**PMID:29786028** **Impact Factor:** NA **H-Index:**NA
732.	Wang, Haidong, Abajobir, Amanuel Alemu, Abate, Kalkidan Hassen, Abbafati, Cristiana, Abbas, Kaja M., Abd-Allah, Foad, Abera, Semaw Ferede, Abraha, Haftom Niguse, Abu-Raddad, Laith J., Abu-Rmeileh, Niveen M. E., Adedeji, Isaac	**INT**	**JUL TO DEC**	**RESPIRATORY MEDICINE**	**PMID:**28919115 **PMCID: PMC**5605514

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Akinkunmi, Adedoyin, Rufus Adesoji, Adetifa, Ifedayo Morayo O., Adetokunboh, Olatunji, Afshin, Ashkan, Aggarwal, Rakesh, Agrawal, Anurag, Agrawal, Sutapa, Kiadaliri, Aliasghar Ahmad, Ahmed, Muktar Beshir, Aichour, Amani Nidhal, Aichour, Ibthiel, Aichour, Miloud Taki Eddine, Aiyar, Sneha, Akanda, Shafqat, Akinyemiju, Tomi F., Akseer, Nadia, Al-Eyadhy, Ayman, Al Lami, Faris Hasan, Alabed, Samer, Alahdab, Fares, Al-Aly, Ziyad, Alam, Khurshid, Alam, Noore, Alasfoor, Deena, Aldridge, Robert William, Alene, Kefyalew Addis, Alhabib, Samia, Ali, Raghib, Alizadeh-Navaei, Reza, Aljunid, Syed M., Alkaabi, Juma M., Alkerwi, Ala'a, Alla, Francois, Allam, Shalini D., Allebeck, Peter, Al-Raddadi, Rajaa, Alsharif, Ubai, Altirkawi, Khalid A., Martin, Elena Alvarez, Alvis-Guzman, Nelson, Amare, Azmeraw T., Ameh, Emmanuel A., Amini, Erfan, Ammar, Walid, Amoako, Yaw Ampem, Anber, Nahla, Andrei, Catalina Liliana, Androudi, Sofia, Ansari, Hossein, Ansha, Mustafa Geleto, Antonio, Carl Abelardo T., Anwari, Palwasha, Arnlov, Johan, Arora, Megha, Al, Artaman, Aryal, Krishna Kumar, Asayesh, Hamid, Asgedom, Solomon Weldegebreal, Asghar, Rana Jawad, Assadi, Reza, Atey, Tesfay Mehari, Atre, Sachin R., Avila-Burgos, Leticia, Avokpaho, Euripide Frinel G. Arthur, Awasthi, Ashish, Quintanilla, Beatriz Paulina Ayala, Babalola, Tesleem Kayode, Bacha, Umar, Badawi, Alaa, Balakrishnan, Kalpana, Balalla, Shivanthi, Barac, Aleksandra, Barber, Ryan M., Barboza, Miguel A., Barker-Collo, Suzanne L., Barnighausen, Till, Barquera, Simon, Barregard, Lars, Barrero, Lope H., Baune, Bernhard T., Bazargan-Hejazi, Shahrzad, Bedi, Neeraj, Beghi, Ettore, Bejot, Yannick, Bekele, Bayu Begashaw, Bell, Michelle L., Bello, Aminu K., Bennett, Derrick A., Bennett, James R., Bensenor, Isabela M., Benson, Jennifer, Berhane, Adugnaw, Berhe, Derbew Fikadu, Bernabe, Eduardo, Beuran, Mircea, Beyene, Addisu Shunu, Bhala, Neeraj, Bhansali, Anil, Bhaumik, Soumyadeep, Bhutta, Zulfiqar A., Bikbov, Boris, Birungi, Charles, Biryukov, Stan, Bisanzio, Donal, Bizuayehu, Habtamu Mellie, Bjerregaard, Peter, Blosser, Christopher D., Boneya, Dube Jara, Boufous, Soufiane, Bourne, Rupert R. A., Brazinova, Alexandra, Breitborde, Nicholas J. K., Brenner, Hermann, Brugha, Traolach S., Bukhman, Gene, Negesa, Lemma, Bulto, Bulto, Bumgarner, Blair Randal, Burch, Michael, Butt, Zahid A., Cahill, Leah E., Cahuana-Hurtado, Lucero, Campos-Nonato, Ismael Ricardo, Car, Josip, Car, Mate, Crdenas, Rosario, Carpenter, David O., Carrero, Juan Jesus, Carter, Austin, Castaneda-Orjuela, Carlos A., Rivas, Jacqueline Castillo, Castro, Franz F., Castro, Ruben Estanislao, Catala-Lopez, Ferran, Chen, Honglei, Chiang, Peggy Pei-Chia, Chibalabala, Mirriam, Chisumpa, Vesper Hichilombwe, Chitheer, Abdulaal A., Choi, Jee-Young Jasmine, Christensen, Hanne, Christopher, Devasahayam Jesudas, Ciobanu, Liliana G., Cirillo, Massimo, Cohen, Aaron J., Colquhoun, Samantha M.,				**WOS:**000410630000002 **Impact Factor:** 47.831 **H-Index:** 646

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Coresh, Josef, Criqui, Michael H., Cromwell, Elizabeth A., Crump, John A., Dandona, Lalit, Dandona, Rakhi, Dargan, Paul I., Das Neves, Jose, Davey, Gail, Davitoiu, Dragos V., Davletov, Kairat, De Courten, Barbora, De Leo, Diego, Degenhardt, Louisa, Deiparine, Selina, Dellavalle, Robert P., Deribe, Kebede, Deribew, Amare, Des Jarlais, Don C., Dey, Subhojit, Dharmaratne, Samath D., Dherani, Mukesh K., Diaz-Torne, Cesar, Ding, Eric L., Dixit, Priyanka, Djalalinia, Shirin, Huyen Phuc, Do, Doku, David Teye, Donnelly, Christl Ann, Priscila, Kadine, Dos Santos, Bender, Douwes-Schultz, Dirk, Driscoll, Tim R., Duan, Leilei, Dubey, Manisha, Duncan, Bruce Bartholow, Dwivedi, Laxmi Kant, Ebrahimi, Hedyeh, El Bcheraoui, Charbel, Ellingsen, Christian Lycke, Enayati, Ahmadali, Endries, Aman Yesuf, Ermakov, Sergey Petrovich, Eshetie, Setegn, Eshrati, Babak, Eskandarieh, Sharareh, Esteghamati, Alireza, Estep, Kara, Fanuel, Belayneh Bekele Fanuel, Faro, Andre, Farvid, Maryam S., Farzadfar, Farshad, Feigin, Valery L., Fereshtehnejad, Seyed-Mohammad, Fernandes, Jefferson G., Fernandes, Joao C., Feyissa, Tesfaye Regassa, Filip, Irina, Fischer, Florian, Foigt, Nataliya, Foreman, Kyle J., Frank, Tahvi, Franklin, Richard C., Fraser, Maya, Friedman, Joseph, Frostad, Joseph J., Fullman, Nancy, Furst, Thomas, Furtado, Joao M., Futran, Neal D., Gakidou, Emmanuela, Gambashidze, Ketevan, Gamkrelidze, Amiran, Gankpe, Fortune Gbetoho, Garcia-Basteiro, Alberto L., Gebregergs, Gebremedhin Berhe, Gebrehiwot, Tsegaye Tewelde, Gebrekidan, Kahsu Gebrekirstos, Gebremichael, Mengistu Welday, Gelaye, Amha Admasie, Geleijnse, Johanna M., Gemechu, Bikila Lencha, Gemechu, Kasiye Shiferaw, Genova-Maleras, Ricard, Gesesew, Hailay Abrha, Gething, Peter W., Gibney, Katherine B., Gill, Paramjit Singh, Gillum, Richard F., Giref, Ababi Zergaw, Girma, Bedilu Weji, Giussani, Giorgia, Goenka, Shifalika, Gomez, Beatriz, Gona, Philimon N., Gopalani, Sameer Vali, Goulart, Alessandra Carvalho, Graetz, Nicholas, Gugnani, Harish Chander, Gupta, Prakash C., Gupta, Rahul, Gupta, Rajeev, Gupta, Tanush, Gupta, Vipin, Haagsma, Juanita A., Hafezi-Nejad, Nima, Bidgoli, Hassan Haghparast, Hakuzimana, Alex, Halasa, Yara A., Hamadeh, Randah Ribhi, Hambisa, Mitiku Teshome, Hamidi, Samer, Hammami, Mouhanad, Hancock, Jamie, Handal, Alexis J., Hankey, Graeme J., Hao, Yuantao, Harb, Hilda L., Hareri, Habtamu Abera, Harikrishnan, Sivadasanpillai, Haro, Josep Maria, Hassanvand, Mohammad Sadegh, Havmoeller, Rasmus, Hay, Roderick J., Hay, Simon I., He, Fei, Heredia-Pi, Ileana Beatriz, Herteliu, Claudiu, Hilawe, Esayas Haregot, Hoek, Hans W., Horita, Nobuyuki, Hosgood, H. Dean, Hostiuc, Sorin, Hotez, Peter J., Hoy, Damian G., Hsairi, Mohamed, Htet, Aung Soe, Hu, Guoqing, Huang, Hsiang, Huang, John J., Iburg, Kim Moesgaard, Igumbor, Ehimario Uche, Ileanu, Bogdan Vasile, Inoue, Manami, Irenso, Asnake Ararsa,				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Irvine, Caleb M. S., Islam, Nazrul, Jacobsen, Kathryn H., Jaenisch, Thomas, Jahanmehr, Nader, Jakovljevic, Mihajlo B., Javanbakht, Mehdi, Jayatilleke, Achala Upendra, Jeemon, Panniyammakal, Jensen, Paul N., Jha, Vivekanand, Jin, Ye, John, Denny, John, Oommen, Johnson, Sarah Charlotte, Jonas, Jost B., Jurisson, Mikk, Kabir, Zubair, Kadel, Rajendra, Kahsay, Amaha, Kalkonde, Yogeshwar, Kamal, Ritul, Kan, Haidong, Karch, Andre, Karema, Corine Kakizi, Karimi, Seyed M., Karthikeyan, Ganesan, Kasaeian, Amir, Kassaw, Nigussie Assefa, Kassebaum, Nicholas J., Kastor, Anshul, Katikireddi, Srinivasa Vittal, Kaul, Anil, Kawakami, Norito, Kazanjan, Konstantin, Keiyoro, Peter Njenga, Kelbore, Sefonias Getachew, Kemp, Andrew Haddon, Kengne, Andre Pascal, Keren, Andre, Kereselidze, Maia, Kesavachandran, Chandrasekharan Nair, Ketema, Ezra Belay, Khader, Yousef Saleh, Khalil, Ibrahim A., Khan, Ejaz Ahmad, Khan, Gulfaraz, Khang, Young-Ho, Khera, Sahil, Khoja, Abdullah Tawfih Abdullah, Khosravi, Mohammad Hossein, Kibret, Getiye Dejenu, Kieling, Christian, Kim, Cho-Il, Kim, Daniel, Kim, Pauline, Kim, Sungroul, Kim, Yun Jin, Kimokoti, Ruth W., Kinfu, Yohannes, Kishawi, Sami, Kissimova-Skarbek, Katarzyna A., Kissoon, Niranjan, Kivimaki, Mika, Knudsen, Ann Kristin, Kokubo, Yoshihiro, Kopec, Jacek A., Kosen, Soewarta, Koul, Parvaiz A., Koyanagi, Ai, Kravchenko, Michael, Krohn, Kristopher J., Defo, Barthelemy Kuate, Bicer, Burcu Kucuk, Kuipers, Ernst J., Kulikoff, Xie Rachel, Kulkarni, Veena S., Kumar, G. Anil, Kumar, Pushpendra, Kumsa, Fekede Asefa, Kutz, Michael, Lachat, Carl, Lagat, Abraham K., Lager, Anton Carl Jonas, Lal, Dharmesh Kumar, Lalloo, Ratilal, Lambert, Nkurunziza, Lan, Qing, Lansingh, Van C., Larson, Heidi J., Larsson, Anders, Laryea, Dennis Odai, Lavados, Pablo M., Laxmaiah, Avula, Lee, Paul H., Leigh, James, Leung, Janni, Leung, Ricky, Levi, Miriam, Li, Yongmei, Liao, Yu, Liben, Misgan Legesse, Lim, Stephen S., Linn, Shai, Lipshultz, Steven E., Liu, Shiwei, Lodha, Rakesh, Logroscino, Giancarlo, Lorch, Scott A., Lorkowski, Stefan, Lotufo, Paulo A., Lozano, Rafael, Lunevicius, Raimundas, Lyons, Ronan A., Ma, Stefan, Macarayan, Erlyn Rachelle King, Machado, Isis Eloah, Mackay, Mark T., Abd El Razek, Mohammed Magdy, Magis-Rodriguez, Carlos, Mahdavi, Mahdi, Majdan, Marek, Majdzadeh, Reza, Majeed, Azeem, Malekzadeh, Reza, Malhotra, Rajesh, Malta, Deborah Carvalho, Mantovani, Lorenzo G., Manyazewal, Tsegahun, Mapoma, Chabila C., Marczak, Laurie B., Marks, Guy B., Martinez-Raga, Jose, Martins-Melo, Francisco Rogerlndio, Massano, Joao, Maulik, Pallab K., Mayosi, Bongani M., Mazidi, Mohsen, Mcalinden, Colm, Mcgarvey, Stephen Theodore, Mcgrath, John J., Mckee, Martin, Mehata, Suresh, Mehndiratta, Man Mohan, Mehta, Kala M., Meier, Toni, Mekonnen, Tefera Chane, Meles, Kidanu Gebremariam, Memiah, Peter, Memish, Ziad A., Mendoza, Walter, Mengesha, Melkamu Merid, Mengistie, Mubarek Abera,				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Tadese, Desalegn, Menon, Mengistu Geetha R., Menota, Bereket Gebremichael, Mensah, George A., Meretoja, Atte, Meretoja, Tuomo J., Mezgebe, Haftay Berhane, Micha, Renata, Mikesell, Joseph, Miller, Ted R., Mills, Edward J., Minnig, Shawn, Mirarefin, Mojde, Mirrakhimov, Erkin M., Misganaw, Awoke, Mishra, Shiva Raj, Mohammad, Karzan Abdulmuhsin, Mohammadi, Alireza, Mohammed, Kedir Endris Shafiu Mohammed, Mohan, Murali B. V., Mohanty, Sanjay K., Mokdad, Ali H., Assaye, Ashagre Molla, Mollenkopf, Sarah K., Molokhia, Mariam, Monasta, Lorenzo, Hernandez, Julio Cesar Montanez, Montico, Marcella, Mooney, Meghan D., Moore, Ami R., Moradi-Lakeh, Maziar, Moraga, Paula, Morawska, Lidia, Velasquez, Ilais Moreno, Mori, Rintaro, Morrison, Shane D., Mruts, Kalayu Birhane, Mueller, Ulrich O., Mullany, Erin, Muller, Kate, Venkata, Gudlavalleti, Murthy, Satyanarayana, Murthy, Srinivas, Musa, Kamarul Imran, Nachega, Jean B., Nagata, Chie, Nagel, Gabriele, Naghavi, Mohsen, Naidoo, Kovin S., Nanda, Lipika, Nangia, Vinay, Nascimento, Bruno Ramos, Natarajan, Gopalakrishnan, Negoi, Ionut, Cuong Tat, Nguyen, Ningrum, Dina Nur Anggraini, Nisar, Muhammad Imran, Nomura, Marika, Vuong Minh, Nong, Norheim, Ole F., Norrving, Bo, Noubiap, Jean Jacques N., Nyakarahuka, Luke, Obermeyer, Carla Makhlouf, O'donnell, Martin J., Ogbo, Felix Akpojene, Oh, In-Hwan, Okoro, Anselm, Oladimeji, Olanrewaju, Olagunju, Andrew Toyin, Olusanya, Bolajoko Olubukunola, Olusanya, Jacob Olusegun, Oren, Eyal, Ortiz, Alberto, Osgood-Zimmerman, Aaron, Ota, Erika, Owolabi, Mayowa O., Oyekale, Abayomi Samuel, Pa, Mahesh, Pacella, Rosana E., Pakhale, Smita, Pana, Adrian, Panda, Basant Kumar, Panda-Jonas, Songhomitra, Park, Eun-Kee, Parsaeian, Mahboubeh, Patel, Tejas, Patten, Scott B., Patton, George C., Paudel, Deepak, Pereira, David M., Perez-Padilla, Rogelio, Perez-Ruiz, Fernando, Perico, Norberto, Pervaiz, Aslam, Pesudovs, Konrad, Peterson, Carrie Beth, Petri, William Arthur, Petzold, Max, Phillips, Michael Robert, Piel, Frederic B., Pigott, David M., Pishgar, Farhad, Plass, Dietrich, Polinder, Suzanne, Popova, Svetlana, Postma, Maarten J., Poulton, Richie G., Pourmalek, Farshad, Prasad, Narayan, Purwar, Manorama, Qorbani, Mostafa, Rabiee, Rynaz H. S., Radfar, Amir, Rafay, Anwar, Rahimi-Movaghar, Afarin, Rahimi-Movaghar, Vafa, Rahman, Mahfuzar, Rahman, Mohammad Hifz Ur, Rahman, Sajjad Ur, Rai, Rajesh Kumar, Rajsic, Sasa, Ram, Usha, Rana, Saleem M., Ranabhat, Chhabi Lal, Rao, Paturi Vishnupriya, Rawaf, Salman, Ray, Sarah E., Rego, Maria Albertina Santiago, Rehm, Jugen, Reiner, Robert C., Remuzzi, Giuseppe, Renzaho, Andre M. N. N., Resnikoff, Serge, Rezaei, Satar, Rezai, Mohammad Sadegh, Ribeiro, Antonio L., Rokni, Mohammad Bagher, Ronfani, Luca, Roshandel, Gholamreza, Roth, Gregory A., Rothenbacher, Dietrich, Roy, Ambuj, Rubagotti, Enrico, Ruhago, George Mugambage, Saadat, Soheil,				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Sabde, Yogesh Damodar, Sachdev, Perminder S., Sadat, Nafis, Safdarian, Mahdi, Safiri, Sare Safi Saeid, Sagar, Rajesh, Sahathevan, Ramesh, Sahebkar, Amirhossein, Sahraian, Mohammad Ali, Salama, Joseph, Salamati, Payman, Salomon, Joshua A., Salvi, Sundeep Santosh, Samy, Abdallah M., Sanabria, Juan Ramon, Sanchez-Nino, Maria Dolores, Santos, Itamar S., Milicevic, Milena M. Santric, Sarmiento-Suarez, Rodrigo, Sartorius, Benn, Satpathy, Maheswar, Sawhney, Monika, Saxena, Sonia, Saylan, Mete I., Schmidt, Maria Ines, Schneider, Ione J. C., Schutte, Aletta E., Schwebel, David C., Schwendicke, Falk, Seedat, Soraya, Seid, Abdulbasit Musa, Sepanlou, Sadaf G., Servan-Mori, Edson E., Shackelford, Katya Anne, Shaheen, Amira, Shahraz, Saeid, Shaikh, Masood Ali, Shamsipour, Mansour, Shamsizadeh, Morteza, Islam, Sheikh Mohammed Shariful, Sharma, Jayendra, Sharma, Rajesh, She, Jun, Shen, Jiabin, Shetty, Balakrishna P., Shi, Peilin, Shibuya, Kenji, Shigematsu, Mika, Shiri, Rahman, Shiue, Ivy, Shrime, Mark G., Sigfusdottir, Inga Dora, Silberberg, Donald H., Silpakit, Naris, Silva, Diego Augusto Santos, Silva, Joao Pedro, Silveira, Dayane Gabriele Alves, Sindi, Shireen, Singh, Abhishek, Singh, Jasvinder A., Singh, Prashant Kumar, Singh, Virendra, Sinha, Dhirendra Narain, Skiadaresi, Eirini, Sligar, Amber, Smith, David L., Sobaih, Badr H. A., Sobngwi, Eugene, Soneji, Samir, Soriano, Joan B., Sreeramareddy, Chandrashekhar T., Srinivasan, Vinay, Stathopoulou, Vasiliki, Steel, Nicholas, Stein, Dan J., Steiner, Caitlyn, Stockl, Heidi, Stokes, Mark Andrew, Strong, Mark, Sufiyan, Muawiyyah Babale, Suliankatchi, Rizwan Abdulkader, Sunguya, Bruno F., Sur, Patrick J., Swaminathan, Soumya, Sykes, Bryan L., Szoeke, Cassandra E. I., Tabares-Seisdedos, Rafael, Tadakamadla, Santosh Kumar, Tadese, Fentaw, Tandon, Nikhil, Tanne, David, Tarajia, Musharaf, Tavakkoli, Mohammad, Taveira, Nuno, Tehrani-Banihashemi, Arash, Tekelab, Tesfalidet, Tekle, Dejen Yemane, Shifa, Girma Temam, Temsah, Mohamad-Hani, Terkawi, Abdullah Sulieman, Tesema, Cheru Leshargie, Tesssema, Belay, Theis, Andrew, Thomas, Nihal, Thompson, Alex H., Thomson, Alan J., Thrift, Amanda G., Tiruye, Tenaw Yimer, Tobe-Gai, Ruoyan, Tonelli, Marcello, Topor-Madry, Roman, Topouzis, Fotis, Tortajada, Miguel, Tran, Bach Xuan, Trujillo, Thomas Truelsen Ulises, Tsilimparis, Nikolaos, Tuem, Kald Beshir, Tuzcu, Emin Murat, Tyrovolas, Stefanos, Ukwaja, Kingsley Nnanna, Undurraga, Eduardo A., Uthman, Olalekan A., Uzochukwu, Benjamin S. Chudi, Van Boven, Job F. M., Varakin, Yuri Y., Varughese, Santosh, Vasankari, Tommi, Vasconcelos, Ana Maria Nogales, Venketasubramanian, Narayanaswamy, Vidavalur, Ramesh, Violante, Francesco S., Vishnu, Abhishek, Vladimirov, Sergey K., Vlassov, Vasiliy Victorovich, Vollset, Stein Emil, Vos, Theo, Waid, Jillian L., Wakayo, Tolassa, Wang, Yuan-Pang, Weichenthal, Scott,				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Weiderpass, Elisabete, Weintraub, Robert G., Werdecker, Andrea, Wesana, Joshua, Wijeratne, Tissa, Wilkinson, James D., Wiysonge, Charles Shey, Woldeyes, Belete Getahun, Wolfe, Charles D. A., Workicho, Abdulhalik, Workie, Shimelash Bitew, Xavier, Denis, Xu, Gelin, Yaghoubi, Mohsen, Yakob, Bereket, Yalew, Ayalnesh Zemene, Yan, Lijing L., Yano, Yuichiro, Yaseri, Mehdi, Ye, Pengpeng, Yimam, Hassen Hamid, Yip, Paul, Yirsaw, Biruck Desalegn, Yonemoto, Naohiro, Yoon, Seok-Jun, Yotebieng, Marcel, Younis, Mustafa Z., Zaidi, Zoubida, Zaki, Maysaa El Sayed, Zeeb, Hajo, Zenebe, Zerihun Menlkalew, Zerfu, Taddese Alemu, Zhang, Anthony Lin, Zhang, Xueying, Zodpey, Sanjay, Zuhlke, Liesl Joanna, Lopez, Alan D., Murray, Christopher J. L. and Collaborators, G. B. D. Mortality Global, regional, and national under-5 mortality, adult mortality, age-specific mortality, and life expectancy, 1970-2016: a systematic analysis for the Global Burden of Disease Study 2016 Lancet; 2017, 390 (10100): 1084-1150 Background Detailed assessments of mortality patterns, particularly age-specific mortality, represent a crucial input that enables health systems to target interventions to specific populations. Understanding how all-cause mortality has changed with respect to development status can identify exemplars for best practice. To accomplish this, the Global Burden of Diseases, Injuries, and Risk Factors Study 2016 (GBD 2016) estimated age-specific and sex-specific all-cause mortality between 1970 and 2016 for 195 countries and territories and at the subnational level for the five countries with a population greater than 200 million in 2016. Methods We have evaluated how well civil registration systems captured deaths using a set of demographic methods called death distribution methods for adults and from consideration of survey and census data for children younger than 5 years. We generated an overall assessment of completeness of registration of deaths by dividing registered deaths in each location-year by our estimate of all-age deaths generated from our overall estimation process. For 163 locations, including subnational units in countries with a population greater than 200 million with complete vital registration (VR) systems, our estimates were largely driven by the observed data, with corrections for small fluctuations in numbers and estimation for recent years where there were lags in data reporting (lags were variable by location, generally between 1 year and 6 years). For other locations, we took advantage of different data sources available to measure under-5 mortality rates (U5MR) using complete birth histories, summary birth histories, and				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	incomplete VR with adjustments; we measured adult mortality rate (the probability of death in individuals aged 15-60 years) using adjusted incomplete VR, sibling histories, and household death recall. We used the U5MR and adult mortality rate, together with crude death rate due to HIV in the GBD model life table system, to estimate age-specific and sex-specific death rates for each location-year. Using various international databases, we identified fatal discontinuities, which we defined as increases in the death rate of more than one death per million, resulting from conflict and terrorism, natural disasters, major transport or technological accidents, and a subset of epidemic infectious diseases; these were added to estimates in the relevant years. In 47 countries with an identified peak adult prevalence for HIV/AIDS of more than 0.5% and where VR systems were less than 65% complete, we informed our estimates of age-sex-specific mortality using the Estimation and Projection Package (EPP)-Spectrum model fitted to national HIV/AIDS prevalence surveys and antenatal clinic serosurveillance systems. We estimated stillbirths, early neonatal, late neonatal, and childhood mortality using both survey and VR data in spatiotemporal Gaussian process regression models. We estimated abridged life tables for all location-years using age-specific death rates. We grouped locations into development quintiles based on the Sociodemographic Index (SDI) and analysed mortality trends by quintile. Using spline regression, we estimated the expected mortality rate for each age-sex group as a function of SDI. We identified countries with higher life expectancy than expected by comparing observed life expectancy to anticipated life expectancy on the basis of development status alone. Findings Completeness in the registration of deaths increased from 28% in 1970 to a peak of 45% in 2013; completeness was lower after 2013 because of lags in reporting. Total deaths in children younger than 5 years decreased from 1970 to 2016, and slower decreases occurred at ages 5-24 years. By contrast, numbers of adult deaths increased in each 5-year age bracket above the age of 25 years. The distribution of annualised rates of change in age-specific mortality rate differed over the period 2000 to 2016 compared with earlier decades: increasing annualised rates of change were less frequent, although rising annualised rates of change still occurred in some locations, particularly for adolescent and younger adult age groups. Rates of stillbirths and under-5 mortality both decreased globally from 1970. Evidence for global convergence of death rates was mixed; although the absolute difference between age-standardised death rates narrowed between countries at the lowest and highest levels of SDI, the ratio of these death rates-a measure of relative inequality-increased slightly. There was a strong shift between 1970 and 2016 toward higher life expectancy, most noticeably				

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	at higher levels of SDI. Among countries with populations greater than 1 million in 2016, life expectancy at birth was highest for women in Japan, at 86.9 years (95% UI 86.7-87.2), and for men in Singapore, at 81.3 years (78.8-83.7) in 2016. Male life expectancy was generally lower than female life expectancy between 1970 and 2016, and the gap between male and female life expectancy increased with progression to higher levels of SDI. Some countries with exceptional health performance in 1990 in terms of the difference in observed to expected life expectancy at birth had slower progress on the same measure in 2016. Interpretation Globally, mortality rates have decreased across all age groups over the past five decades, with the largest improvements occurring among children younger than 5 years. However, at the national level, considerable heterogeneity remains in terms of both level and rate of changes in age-specific mortality; increases in mortality for certain age groups occurred in some locations. We found evidence that the absolute gap between countries in age-specific death rates has declined, although the relative gap for some age-sex groups increased. Countries that now lead in terms of having higher observed life expectancy than that expected on the basis of development alone, or locations that have either increased this advantage or rapidly decreased the deficit from expected levels, could provide insight into the means to accelerate progress in nations where progress has stalled. Copyright (C) The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY 4.0 license. DOI: 10.1016/S0140-6736(17)31833-0				
733.	Wankhar, S., Kota, A. A. and Selvaraj, D. A versatile stretch sensor for measuring physiological movement using a centre loaded, end-supported load cell J Med Eng Technol; 2017, 41 (5): 406-414 **Address:** a Department of Bioengineering, **Christian Medical College, Vellore,** India. b Department of Vascular Surgery, **Christian Medical College, Vellore,** India. Acquisition of movement of some body parts can provide important physiological information. In clinical practice as well as for research purposes different types of sensors such as piezoelectric crystals, conductive rubber and optical displacement sensors are used for such measurements. Each of these sensors is associated with	**INT**	**JAN TO JUN**	**BIOENGINEERING, VASCULAR SURGERY**	**PMID:**28447865 **Impact Factor:** 0.950 **H-Index:** 36

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	its problems. This paper discusses the use of a stretch sensor constructed using a small metal bar, approximately the size of a zipper slider that can be sewn into a fabric in the form of a belt. A combination of elastic, and Velcro material attached to the metal bar, provides a sensor that is capable of linear, steady state measurement as well as rapid response detecting slow and fast movement of the target. Incorporating the sensor in an elastic belt, allows measurement of physiological movements such as respiratory chest movements, abdominal and limb movements. This paper also discusses the potential use of the novel stretch sensor in measuring change in calf circumference during different manoeuvres, making it a useful assessment tool for calf venous function.				
734.	Wankhar, S., Srampickal, G. M., Mathew, A. and Thomas, B. P. A simple method for quantitative assessment of elbow flexion strength J Med Eng Technol; 2017, 41 (7): 529-533 **Address:** a Department of Bioengineering, **Christian Medical College vellore**, India. b Department of Orthopaedics , **Christian Medical College vellore** , Vellore , India. c Department of Hand Surgery , **Christian Medical College vellore** , Vellore , India. Assessment of elbow flexion strength is an important component of upper limb neurological examination and is necessary for patient screening, planning of surgical interventions and rehabilitation. Medical Research Council (MRC) Scale is the most widely used method for grading muscle strength. The major drawback of MRC grading is that it is observer dependent and imprecise. A quantitative measure of elbow flexion strength is an objective measure that eliminates such bias. Several instruments have been developed for quantifying the elbow flexion power. However, availability, quality and measuring standards vary widely between these instruments most being cumbersome and expensive. We report the design of an instrument that is simple and cost effective for quantifying elbow flexion strength objectively. The validity of elbow flexion strength obtained from normal participants using this in-house instrument supports its clinical use in patients with brachial plexus injury.	**INT**	**JUL TO DEC**	**BIOENGINEERING**	**PMID:**28849955 **Impact Factor:** 0.950 **H-Index:** 36
735.	Wattal, C., Chakrabarti, A., Oberoi, J. K., Donnelly, J. P., Barnes, R. A., Sherwal, B. L., Goel, N., Saxena, S., Varghese, G. M., Soman, R., Loomba, P., Tarai, B., Singhal, S., Mehta, N., Ramasubramanian, V., Choudhary, D., Mehta, Y., Ghosh,	**INT**	**JAN TO JUN**	**INFECTIOUS DISEASES**	**PMID:**27999053 **Impact Factor:** 5.071

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	S., Muralidhar, S. and Kaur, R. Issues in antifungal stewardship: an opportunity that should not be lost J Antimicrob Chemother; 2017, 72 (4): 969-974 **Address:** Department of Clinical Microbiology and Immunology, Sir Ganga Ram Hospital, Rajinder Nagar, New Delhi 110060, India. Department of Medical Microbiology, PGIMER, Chandigarh, India. Studies in Supportive Care, Radboud UMC, The Netherlands. Department of Medical Microbiology & Infectious Diseases, Division of Infection &Immunity, School of Medicine, Cardiff University, UK. Rajendra Institute of Medical Sciences, Ranchi, India. Department of Medical Microbiology, Lady Hardinge Medical College, New Delhi, India. Department of Infectious Diseases, **Christian Medical College, Vellore,** India. P. D. Hinduja Hospital, Mumbai, India. G. B. Pant Institute of Post Graduate Medical Education & Research, New Delhi, India. (Pan Max) Microbiology, Saket, New Delhi, India. ESIPGIMSR, New Delhi, India. Surgical Gastroenterology & Liver Transplantation, Sir Ganga Ram Hospital, New Delhi, India. Infectious Diseases & Tropical Medicine, Apollo Hospitals, Infectious Diseases, Sri Ramachandra Medical College & Research Institute, Infectious Diseases, MGR Medical University, Chennai, India. BLK Centre for Bone Marrow Transplant, New Delhi, India. Medanta (The Medicity), Medanta Institute of Critical Care and Anesthesiology, Gurgaon, Haryana, India. Department of Critical Care Medicine, Fortis-Escorts Hospital, Faridabad, Haryana, India. Apex Regional STD Teaching Training & Research Centre, Vardhman Mahavir Medical College, Safdarjung Hospital, New Delhi, India. Many countries have observed an increase in the incidence of invasive fungal infections (IFIs) over the past two decades with emergence of new risk factors and isolation of new fungal pathogens. Early diagnosis and appropriate antifungal treatment remain the cornerstones of successful outcomes. However, due to non-specific clinical presentations and limited availability of rapid diagnostic tests, in more than half of cases antifungal treatment is inappropriate. As a result, the emergence of antifungal resistance both in yeasts and mycelial fungi is becoming increasingly common. The Delhi Chapter of the Indian Association of Medical Microbiologists (IAMM-DC) organized a 1 day workshop in collaboration with BSAC on 10 December 2015 in New Delhi to design a road map towards the development of a robust antifungal stewardship programme in the context of conditions in India. The workshop aimed at developing a road map for optimizing better outcomes in patients with IFIs while minimizing unintended consequences of antifungal use,				**H-Index:** 160

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	ultimately leading to reduced healthcare costs and prevention development of resistance to antifungals. The workshop was a conclave of all stakeholders, eminent experts from India and the UK, including clinical microbiologists, critical care specialists and infectious disease physicians. Various issues in managing IFIs were discussed, including epidemiology, diagnostic and therapeutic algorithms in different healthcare settings. At the end of the deliberations, a consensus opinion and key messages were formulated, outlining a step-by-step approach to tackling the growing incidence of IFIs and antifungal resistance, particularly in the Indian scenario.				
736.	Weisdorf, D., Ruiz-Arguelles, G. J., Srivastava, A., Gomez-Almaguer, D. and Szer, J. Economic Challenges in Hematopoietic Cell Transplantation: How Will New and Established Programs Face the Growing Costs? Biol Blood Marrow Transplant; 2017, 23 (11): 1815-1816 **Address:** Blood and Marrow Transplant Program, University of Minnesota, Minneapolis, Minnesota. Electronic address: weisd001@umn.edu. Centro de Hematologia y Medicina Interna de Puebla, Puebla, Mexico. Haematology Department, **Christian Medical College, Vellore,** Tamil Nadu, India. Departamento de Hematologia, Hospital Universitario Dr. Jose Eleuterio Gonzalez, Facultad de Medicina, de la Universidad Autonoma de Nuevo Leon, Monterrey, Mexico. Royal Melbourne Hospital, Melbourne, Australia.	**INT**	**JUL TO DEC**	**HAEMATOLOGY**	**PMID:**28797786 **WOS:**000416196600003 **Impact Factor:** 4.704 **H-Index:** 99
737.	White, A. C. and Kang, G. Multiplex molecular diagnostic tests and the management of diarrhea: the wave of the future? Curr Opin Infect Dis; 2017, 30 (5): 471-472 **Address:** aDepartment of Internal Medicine, Infectious Disease Division, University of Texas Medical Branch, Galveston, Texas, USAbDivision of Gastrointestinal Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India.	**INT**	**JUL TO DEC**	**WELLCOME TRUST RESEARCH LABORATORY**	**PMID:**28873080 **Impact Factor:**4.242 **H-Index:** 86
738.	Williams, A., Chandrashekar, L., Srivastava, V. M., Thomas, M., Horo, S. and George, R. Incontinentia pigmenti, an x-linked dominant disorder, in a 2-year-old boy with Klinefelter syndrome	**NAT**	**JUL TO DEC**	**DERMATOLOGY, PATHOLOGY, OPHTHALMOL**	**PMID:**28937389 **Impact Factor:** 0.616 **H-Index:** 25

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Indian J Pathol Microbiol; 2017, 60 (3): 424-426 **Address:** Department of Dermatology, **Christian Medical College,** Ludhiana, Punjab, India. Department of Dermatology, Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry, Tamil Nadu, India. Department of Cytogenetics, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Pathology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Ophthalmology, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Dermatology, Venereology and Leprosy, **Christian Medical College, Vellore,** Tamil Nadu, India. Incontinentia pigmenti (IP) is a rare X-linked dominant disorder, in which skin lesions distributed along Blaschko's lines appear shortly after birth. Early lesions which are erythematous/bullous evolve over time into warty lesions, hyperpigmented swirls/macules, and atrophic hypopigmented streaks. Clinical features are heterogeneous. Abnormalities of the teeth, nails, hair, eyes, central nervous system, and breast may also be present. While intelligence is generally normal, varied degrees of intellectual disability/developmental delay have been reported. Lifespan is normal. IP is associated with mutations of the inhibitor of kappa light polypeptide gene enhancer in B cell, kinase gamma (IKBKG) gene on chromosome Xq28. This gene is involved in the activation of nuclear factor kappa B which protects cells against apoptosis; therefore, cells with IKBKG mutations are extremely susceptible to apoptosis. X-linked dominant disorders are lethal to male fetuses. Males who survive with IP either have mosaicism or an additional X chromosome (Klinefelter syndrome). We present a 22-month-old boy with IP and Klinefelter syndrome.			**OGY**	
739.	Winston, A. B., Das Adhikari, D., Das, S., Vazhudhi, K., Kumar, A., Shanthi Fx, M. and Agarwal, I. Drug poisoning in the community among children: a nine years' experience from a tertiary care center in south India Hosp Pract (1995); 2017, 45 (1): 21-27 **Address:** a Department of Pharmacology and Clinical Pharmacology, **Christian Medical College, Vellore,** Tamil Nadu, India. b Paediatric Emergency, Department	**INT**	**JAN TO JUN**	**PHARMACOLOGY AND CLINICAL PHARMACOLOGY, PEDIATRICS, CHILD HEALTH UNIT**	**PMID:**27985284 **Impact Factor:** 1.220 **H-Index:** 14

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	of Paediatrics, **Christian Medical College, Vellore,** Tamil Nadu, India. c Child Health 2, Department of Paediatrics, **Christian Medical College, Vellore,** Tamil Nadu, India. **OBJECTIVES:** This study was performed to determine the incidence, demographic distribution, types and outcomes across various drug poisonings among children from south India. **METHODS:** This retrospective study included children less than 16 years who presented to the Pediatric Emergency Department with drug poisoning from the 1st of October 2004 to the 30th of September 2013. **RESULTS:** Out of the total 997 poisoning cases, 366 (36.71%) were contributed by drugs; mainly antiepileptics, central nervous system depressants, psychotropics, analgesic-antipyretics and natural drugs. Males and children of < 5 years were mostly affected. Although many children developed complications and required intensive care unit admissions, the total mortality rate was less than 1%. The incidence of drug poisoning showed a decreasing trend over the last 4 years. **CONCLUSION:** This study for the first time gives an elaborative insight into pediatric drug poisoning over a nine-year period from a Pediatric Emergency Department tertiary care center in south India.			**II**	
740.	Wood, M. D., Tihan, T., Perry, A., Chacko, G., Turner, C., Pu, C., Payne, C., Yu, A., Bannykh, S. I. and Solomon, D. A. Multimodal molecular analysis of astroblastoma enables reclassification of most cases into more specific molecular entities Brain Pathol; 2017, **Address:** Department of Pathology, Division of Neuropathology, University of California, San Francisco, CA. Department of Neurological Surgery, University of California, San Francisco, CA. Department of Pathology, Division of Neuropathology, **Christian Medical College, Vellore,** Tamil Nadu, India. Anatomical Pathology, LabPLUS Auckland City Hospital, Auckland, New Zealand. Department of Pathology, Allegheny General Hospital, Pittsburgh, PA. Department of Neurosurgery, Allegheny General Hospital, Pittsburgh, PA. Department of Pathology and Laboratory Medicine, Cedars-Sinai Medical Center, Los Angeles, CA. Astroblastoma is a rare and controversial glioma with variable clinical behavior. The diagnosis currently rests on histologic findings of a circumscribed glioma with astroblastomatous pseudorosettes and vascular hyalinization.	**INT**	**JUL TO DEC**	**NEUROPATHOLOGY**	**PMID:**28960623 **Impact Factor:** 6.624 **H-Index:** 115

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Immunohistochemical studies have suggested different oncogenic drivers, such as BRAF p.V600E, but very few cases have been studied using genome-wide methodologies. Recent genomic profiling identified a subset of CNS embryonal tumors with astroblastoma-like morphology that harbored MN1 gene fusions, termed "CNS high-grade neuroepithelial tumors with MN1 alteration" (CNS-HGNET-MN1). To further characterize the genetic alterations that drive astroblastomas, we performed targeted next-generation sequencing (NGS) of 500 cancer-associated genes in a series of eight cases. We correlated these findings with break-apart fluorescence in situ hybridization (FISH) analysis of the MN1 locus and genome-wide DNA methylation profiling. Four cases showed MN1 alteration by FISH, including two pediatric cases that lacked other pathogenic alterations, and two adult cases that harbored other cancer-associated gene mutations or copy number alterations (eg, CDKN2A/B homozygous deletion, TP53, ATM and TERT promoter mutations). Three of these cases grouped with the CNS-HGNET-MN1 entity by methylation profiling. Two of four MN1 intact cases by FISH showed genetic features of either anaplastic pleomorphic xanthoastrocytoma (BRAF p.V600E mutation, CDKN2A/B homozygous deletion and TERT promoter mutation) or IDH-wildtype glioblastoma (trisomy 7, monosomy 10, CDK4 amplification and TP53, NRAS and TERT promoter mutations) and these cases had an aggressive clinical course. Two clinically indolent cases remained unclassifiable despite multimodal molecular analysis. We conclude that astroblastoma histology is not specific for any entity including CNS-HGNET-MN1, and that additional genetic characterization should be considered for astroblastomas, as a number of these tumors likely contain a methylation profile or genetic alterations that suggest classification as other tumor entities. Our heterogeneous molecular findings help to explain the clinical unpredictability of astroblastoma.				
741.	Yoganathan, S., Sudhakar, S. V., Arunachal, G., Thomas, M., Subramanian, A., George, R. and Danda, S. Menkes disease and response to copper histidine: An Indian case series Ann Indian Acad Neurol; 2017, 20 (1): 62-68 **Address:** Department of Neurological Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Radiodiagnosis, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Medical Genetics, **Christian Medical College, Vellore,** Tamil Nadu,	**NAT**	**JAN TO JUN**	**PHARMACY, NEUROLOGICAL SCIENCES, RADIODIAGNOSIS, MEDICAL GENETICS, DERMATOLOGY**	**PMID:**28298846 **Impact Factor:** 0.950 **H-Index:** 17

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	India. Department of Pharmacy Services, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Dermatology, **Christian Medical College, Vellore,** Tamil Nadu, India. **BACKGROUND:** Menkes disease (MD) is an X-linked recessive neurodegenerative disorder caused by mutations in ATP7A gene. Depending on the residual ATP7A activity, manifestation may be classical MD, occipital horn syndrome, or distal motor neuropathy. Neurological sparing is expected in female carriers. However, on rare occasions, females may manifest with classical clinical phenotype due to skewed X-chromosome inactivation, X-autosome translocation, and XO genotype. Here, we describe a small series of probands with MD and their response to copper histidine therapy. This series also includes a female with X-13 translocation manifesting neurological symptoms. **METHODS:** The clinical profile, laboratory and radiological data, and follow-up of four children with MD were collected from the hospital database and are being presented. **RESULTS:** All the four children in our series had developmental delay, recurrent respiratory tract infections, hair and skeletal changes, axial hypotonia, tortuous vessels on imaging, low serum copper, ceruloplasmin, and elevated lactate. Fetal hypokinesia and fetal growth retardation were present in two cases. Failure to thrive was present in three children and only one child had epilepsy. Subcutaneous copper histidine was administered to all children. The average time lapse in the initiation of treatment was 20.3 months, and average duration of follow-up was 14.3 months. **CONCLUSION:** We conclude that copper histidine therapy is beneficial in reversing the skin and hair changes, improving appendicular tone, socio-cognitive milestones, and improving weight gain, and immunity. Early diagnosis and management of MD are essential to have a better clinical outcome. More research is needed to explore and devise new strategies in the management of patients with MD.				
742.	Yoganathan, S., Sudhakar, S. V., Priyambada, L. and Thomas, M. Stroke in a Child with Dengue Encephalopathy Ann Indian Acad Neurol; 2017, 20 (3): 329-331 **Address:** Department of Neurological Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Radiodiagnosis, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Pediatrics, **Christian Medical College, Vellore,** Tamil Nadu, India.	**NAT**	**JUL TO DEC**	**NEUROLOGICAL SCIENCES, PEDIATRICS**	**PMID:**28904475 **PMCID:**5586138 **Impact Factor:** 0.950 **H-Index:** 17
743.	Yoganathan, S., Varman, M., Oommen, S. P. and Thomas, M.	**INT**	**JAN TO**	**NEUROLOGICA**	**PMID:29675077**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	A Tale of Treatable Infantile Neuroregression and Diagnostic Dilemma with Glutaric Aciduria Type I J Pediatr Neurosci; 2017, 12 (4): 356-359 Address: Department of Neurological Sciences, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Radiodiagnosis, **Christian Medical College, Vellore,** Tamil Nadu, India. Department of Developmental Pediatrics, **Christian Medical College, Vellore,** Tamil Nadu, India. Nutritional deficiencies related neurological manifestations are not uncommon in infants and children. Here, we describe an infant with Vitamin B12 deficiency due to depleted maternal Vitamin B12 status presenting with progressive encephalopathy and extrapyramidal signs. Diagnosis of infantile tremor syndrome was established in our patient based on the clinical and biochemical parameters. Magnetic resonance imaging had shown frontotemporal atrophy with widened Sylvian fissures and prominent cerebrospinal fluid spaces. Clinical and imaging findings might create a diagnostic dilemma with glutaric aciduria type I. Knowledge and identification of infantile tremor syndrome are essential, as it is a potentially treatable disorder. Our patient had significant developmental gains with Vitamin B12 treatment and infant stimulation program. Vitamin B12 deficiency must be looked for as a cause of neuroregression in children hailing from low socioeconomic status, infants of vegetarian mother, and infants with delayed or improper weaning. Screening for Vitamin B12 deficiency is essential in all infants and children with unexplained neuroregression, as this disorder is potentially treatable. More population-based studies in India are needed to explore the prevalence of Vitamin B12 deficiency in pregnant and lactating women and also to assess the need for Vitamin B12 supplementation during pregnancy and lactation.		**JUN**	**L SCIENCES, RADIODIAGNOSIS, DEVELOPMENTAL PEDIATRICS**	**PMC ID:5890558** **Impact Factor:** NA **H-Index:**NA
744.	**Zachariah SM, Oommen SP, Koshy B.** Clinical features and diagnosis of autism spectrum disorder in children. Curr Med Issues2017;15:6-16. **Address:**Department of Developmental Pediatrics, Developmental Paediatrics Unit, **Christian Medical College and Hospital, Vellore**, Tamil Nadu, India Autism spectrum disorder (ASD) is a neurodevelopmental disorder of behavior that presents in childhood. It is a clinically heterogeneous disorder of behavior, characterized by two features - (1) impairment in social communication and interaction and (2) repetitive patterns of behavior. The diagnosis is essentially clinical and is based primarily on history-taking and observation of the child over a period. There are several standardized screening tools and scales available to help make a diagnosis. Children with autism often present with speech delay and this has to be distinguished from other conditions. ASD is often associated with	**NAT**	**JUL TO DEC**	**DEVELOPMENTAL PAEDIATRICS**	**Not Indexed in PubMed**

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2017(JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	comorbid conditions which have to be identified to tailor the treatment program for each child. It is important that the parents or caretakers of the child are involved in the process of assessment and diagnosis and that their misconceptions and fears are addressed.				
745.	Zachariah, S. M., Oommen, S. P., Padankatti, C. S., Grace, H. and Glory, L. Dysmorphism in Non-Syndromic Autism: A Cross-Sectional Study Indian Pediatrics; 2017, 54 (7): 560-562 **Address:** Developmental Paediatrics Unit, **Christian Medical College and Hospital, Vellore**, India. Correspondence to: Dr Susan Mary Zachariah, Developmental Paediatrics Unit, **Christian Medical College, Vellore,** India. suz.mary@gmail.com **OBJECTIVE:** To determine the effect of association of dysembryogenesis (manifested by presence of dysmorphic markers) on the developmental profile of autistic children. **METHODS:** 26 autistic children were classified into complex autism (if they had specific dysmorphic markers) or essential autism (in the absence of dysmorphic markers) using the Miles Autism Dysmorphology Measure (ADM). The developmental abilities (Griffith's Mental Development Scales) and the clinical severity (Childhood Autism Rating Scale) of both groups were compared. The prevalence of dysmorphic markers was also determined in 140 non-autistic controls. **RESULTS:** Children with complex autism had poorer development (General Quotient 29.4 vs 34.0, P=0.06) and earlier onset of autistic symptoms (18 vs 24 mo, P=0.05). Dysmorphic markers were significantly more in autistic children compared to normal children (27% vs 10%, P=0.002). **CONCLUSIONS:** Dysembryogenesis may contribute to the clinical heterogeneity of autistic children.	**NAT**	**JAN TO JUN**	**DEVELOPMENTAL PAEDIATRICS UNIT**	**PMID:**28159942 **Impact Factor:** 1.152 **H-Index:** 41

CMC SCIENTIFIC RESEARCH PUBLICATIONS FOR THE YEAR 2017 (JANUARY TO DECEMBER)

ORIGIN	JANUARY TO JUNE	JULY TO DECEMBER	TOTAL
INTERNATIONAL	**252**	**292**	**544**
NATIONAL	**91**	**110**	**201**
TOTAL =	**343**	**402**	**745**