

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
1.	Aaron, S., Lakshmanan, J., Sudarsanam, T. D., Benjamin, K., Durairaj, J., Mathew, V., Sivadasan, A., Prabhakar, A. T., Keshava, S. K. N., Mannam, P. R., Kirubakaran, P., Muliyl, J. and Alexander, M. Cerebral Venous Thrombosis, Seasonal Trends, and Climatic Influence: A Region-Specific Study Ann Indian Acad Neurol; 2020, 23 (4): 522-527 Address: Department of Neurology, Christian Medical College Hospital, Vellore , Tamil Nadu, India. Department of Biostatistics, Christian Medical College Hospital, Vellore , Tamil Nadu, India. Department of General Medicine, Christian Medical College Hospital, Vellore , Tamil Nadu, India. Department of Radiology, Christian Medical College Hospital, Vellore , Tamil Nadu, India. Department of Community Medicine, Christian Medical College Hospital, Vellore , Tamil Nadu, India.	NAT	JUL TO DEC	Neurology, Biostatistics , General Medicine, Radiology, Community Medicine	PMID: 33223671 PMC:7657288
2.	Aaron, S., Mannam, P. R., Shaikh, A., Mani, A. M., Bal, D. and Pandian, J. D. Acute Ischemic Stroke in Term Pregnancy Treated with Recombinant Tissue Plasminogen Activator Case Reports in Neurology; 2020, 12 (Suppl1): 4-8 Address: Department of Neurology, Christian Medical College, Vellore , India Department of Radiology, Christian Medical College, Vellore , India Department of Neurology, Christian Medical College , Ludhiana, India	INT	JUL TO DEC	Neurology, Radiology	PMID: 33505265 PMCID: PMC7802499
3.	Abdul Kalam, S., Carey, R. A. B., Antony, J. and Abraham, O. C. Acute infectious purpura fulminans: a case series from India Trop Doct; 2020, 50 (4): 330-334 Address: [Abdul Kalam, Sumayya; Carey, Ronald A. B.; Abraham, O. C.] Christian Med Coll & Hosp , Dept Med, Ida Scudder Rd, Vellore 632004, Tamil Nadu, India. [Antony, John] Christian Med Coll & Hosp , Dept Clin Microbiol, Vellore , Tamil Nadu, India. Carey, RAB (reprint author), Christian Med Coll & Hosp , Dept Med, Ida Scudder Rd, Vellore 632004, Tamil Nadu, India. ronalddcarey@gmail.com	INT	JAN TO JUN	Medicine, Clinical Microbiology	PMID: 32998655 SCOPUS WOS:000542294900001 H-INDEX:32 IF: 0.591 BIOXBIO (2018/2019)
4.	Abhilash, K. P. P., Sharma, P., Ramesh, V., Samuel, J. J., Vinod, P., Arun, P. and Cornelius, A. G. Emergencies on the train and railway stations managed at a railway station emergency care center J Family Med Prim Care; 2020, 9 (2): 807-811 Address: Department of, Christian Medical College, Vellore , Tamil Nadu, India.	NAT	JAN TO JUN	Emergency Medicine	PMID:32318425 PMC ID: PMC7114022 H-INDEX:NA IF: 0.210 RG (2018/2019)
5.	Abhilash, K. P., Acharya, H., Dua, J., Kumar, S., Selvaraj, B. and Priya, G. Impact of oxygen therapy algorithm on oxygen usage in the emergency department J Postgrad Med; 2020, 66 (3): 128-132 Address: Department of Emergency Medicine, c, Tamil Nadu, India.	NAT	JUL TO DEC	Emergency Medicine	PMID: 32675448 PMC:7542065

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6.	<p>Abraham, A. S., Simon, B., Eapen, A., Sathyakumar, K., Chandramohan, A., Raju, R. S., Joseph, P., Kodiatt, T. A. and Gowri, M. Role of Cross-sectional Imaging (CT/MRI) in Characterization and Distinguishing Benign from Malignant/Potentially Malignant Cystic Lesions of Pancreas J Clin Imaging Sci; 2020, 10 28</p> <p>Address: Departments of Radiodiagnosis, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Departments of Hepatopancreaticobiliary Surgery, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Departments of Pathology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Biostatistics, Christian Medical College and Hospital, Vellore, Tamil Nadu, India.</p>	INT	JAN TO JUN	Radiodiagnosis, Hepatopancreaticobiliary Surgery, Pathology, Biostatistics	<p>PMID:32494507 PMC ID: PMC7265468 H-INDEX:15 IF: 1.750 BIOXBIO (2018/2019)</p>
7.	<p>Abraham, S., Gupta, A. and Khare, M. Primary care for India's urban dwellers living in informal settlements during the COVID-19 pandemic: The experience of the Christian Medical College, Vellore, Department of Family Medicine Aust J Gen Pract; 2020, 49 Address: MBBS, DFM, DNB Family Medicine, FRACGP, Professor and Head, Department of Family Medicine, Christian Medical College Vellore, Tamil Nadu, India. MD, CCFP, MPH, Family Physician, Toronto, Canada. PhD, MS, Research Associate Professor, Interim Director, Division of Health Policy and Social Science Research, Department of Family and Community Medicine, University of Illinois, College of Medicine Rockford, Illinois, USA.</p>	INT	JUL TO DEC	Family Medicine	PMID: 33051632
8.	<p>Agarwal, D., Ghorpade, D., Salvi, S., Hanafi, N. S., Yusuf, O., Khan, M. S., Das, D., Paul, B., Isaac, R., Islam, M. S., Saha, S., Liew, S. M., Hussein, N., Abu Bakar, A. I., Pang, Y. K., Chinna, K., Wong, L. P., Parker, R., Khoo, E. M., Juvekar, S. and Pinnock, H. Estimating Chronic Respiratory Disease (Asthma and COPD) burden in adults in Asian LMICs: a pilot study for 4CCORD 4 Country ChrOnic Respiratory Disease study European Respiratory Journal; 2020, 56 Address: [Agarwal, Dhiraj; Juvekar, Sanjay] KEM Hosp Res Ctr, Pune, Maharashtra, India. [Ghorpade, Deesha; Salvi, Sundeep] Chest Res Fdn, Pune, Maharashtra, India. [Hanafi, Nik Sherina; Liew, Su May; Hussein, Norita; Abu Bakar, Ahmad Ihsan; Pang, Yong Kek; Wong, Li Ping; Khoo, Ee Ming] Univ Malaya, Fac Med, Kuala Lumpur, Malaysia. [Yusuf, Osman; Khan, Mohsin Saeed] Allergy & Asthma Inst, Islamabad, Pakistan. [Das, Deepa; Paul, Biswajit; Isaac, Rita] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Islam, Mohammad Shahidul; Saha, Samir] Dhaka Shishu Hosp, Dhaka, Bangladesh. [Chinna, Karuthan] Taylors Univ Malaysia, Sch Med, Malaya, Malaysia. [Parker, Richard; Pinnock, Hilary] Univ Edinburgh, Usher Inst, Edinburgh, Midlothian, Scotland. ahiraj.agarwal99@gmail.com</p>	INT	JUL TO DEC	Community Medicine	WOS:000606501404175
9.	<p>Aker, K., Støen, R., Eikenes, L., Martinez-Biarge, M., Nakken, I., Håberg, A. K., Gibikote, S. and Thomas, N.</p>	INT	JUL TO DEC	Radiology, Neonatology	<p>PMID: 31662328 PMC:7363785</p>

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	<p>Therapeutic hypothermia for neonatal hypoxic-ischaemic encephalopathy in India (THIN study): a randomised controlled trial Arch Dis Child Fetal Neonatal Ed; 2020, 105 (4): 405-411</p> <p>Address: Department of Clinical and Molecular Medicine, Norwegian University of Science and Technology, Trondheim, Norway karoline.aker@ntnu.no. Department of Paediatrics, St Olavs Hospital, Trondheim University Hospital, Trondheim, Norway. Department of Clinical and Molecular Medicine, Norwegian University of Science and Technology, Trondheim, Norway. Department of Circulation and Medical Imaging, Norwegian University of Science and Technology, Trondheim, Norway. Department of Paediatrics, Imperial College London, London, UK. Norwegian Advisory Unit for Functional MRI, Department of Radiology, St Olavs Hospital, Trondheim University Hospital, Trondheim, Norway. Department of Neuroscience, Norwegian University of Science and Technology, Trondheim, Norway. Department of Radiology, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. Department of Neonatology, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India.</p> <p>OBJECTIVE: To evaluate the neuroprotective effect of therapeutic hypothermia (TH) induced by phase changing material (PCM) on MRI biomarkers in infants with hypoxic-ischaemic encephalopathy (HIE) in a low-resource setting. DESIGN: Open-label randomised controlled trial. SETTING: One neonatal intensive care unit in a tertiary care centre in India. PATIENTS: 50 term/near-term infants admitted within 5 hours after birth with predefined physiological criteria and signs of moderate/severe HIE. INTERVENTIONS: Standard care (n=25) or standard care plus 72 hours of hypothermia (33.5°C±0.5°C, n=25) induced by PCM. MAIN OUTCOME MEASURES: Primary outcome was fractional anisotropy (FA) in the posterior limb of the internal capsule (PLIC) on neonatal diffusion tensor imaging analysed according to intention to treat. RESULTS: Primary outcome was available for 22 infants (44%, 11 in each group). Diffusion tensor imaging showed significantly higher FA in the cooled than the non-cooled infants in left PLIC and several white matter tracts. After adjusting for sex, birth weight and gestational age, the mean difference in PLIC FA between groups was 0.026 (95% CI 0.004 to 0.048, p=0.023). Conventional MRI was available for 46 infants and demonstrated significantly less moderate/severe abnormalities in the cooled (n=2, 9%) than in the non-cooled (n=10, 43%) infants. There was no difference in adverse events between groups. CONCLUSIONS: This study confirmed that TH induced by PCM reduced brain injury detected on MRI in infants with moderate HIE in a neonatal intensive care unit in India. Future research should focus on optimal supportive treatment during hypothermia rather than looking at efficacy of TH in low-resource settings. TRIAL REGISTRATION NUMBER: CTRI/2013/05/003693.</p>				

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10.	<p>Alam, M. A., Richard, S. A., Fahim, S. M., Mahfuz, M., Nahar, B., Das, S., Shrestha, B., Koshy, B., Mduma, E., Seidman, J. C., Murray-Kolb, L. E., Caulfield, L. E. and Ahmed, T.</p> <p>Impact of early-onset persistent stunting on cognitive development at 5 years of age: Results from a multi-country cohort study PLoS One; 2020, 15 (1): e0227839</p> <p>Address: icddr, b, Shaheed Tajuddin Ahmed Sarani, Mohakhali, Dhaka, Bangladesh. Fogarty International Center/National Institutes of Health, Bethesda, MD, United States of America. Water Reed/AFRIMS Research Unit Nepal (WARUN), Kathmandu, Nepal. Christian Medical College, Vellore, India. Haydom Lutheran Hospital, Haydom, Tanzania. The Pennsylvania State University, University Park, PA, United States of America. The Johns Hopkins University, Baltimore, MD, United States of America.</p> <p>BACKGROUND: Globally more than 150 million children under age 5 years were stunted in 2018, primarily in low- and middle-income countries (LMICs), and the impact of early-onset, persistent stunting has not been well explored. To explore the association between early-onset persistent stunting in children and cognitive development at 5 years of age, and to identify the factors associated with early-onset stunting. METHODS AND FINDINGS: Children from the MAL-ED cohort study were followed from birth to 5 years of age in six LMICs. The Wechsler Preschool Primary Scales of Intelligence (WPPSI) was used to assess cognitive abilities (fluid reasoning) at 5 years and was adapted for each culture. Stunting was categorized as early-onset persistent (first stunted at 1-6 months and persisting at 60 months), early-onset recovered (first stunted at 1-6 months and not stunted at 60 months), late-onset persistent (first stunted at 7-24 months and persisting at 60 months), late-onset recovered (first stunted at 7-24 months and not stunted at 60 months), and never (never stunted). Mixed effects linear models were used to estimate the relationship between stunting status and cognitive development. Children with early-onset persistent stunting had significantly lower cognitive scores (-2.10 (95% CI: -3.85, -0.35)) compared with those who were never stunted. Transferrin receptor (TfR) was also negatively associated with cognitive development (-0.31 (95% CI: -0.49, -0.13)), while the HOME inventory, an index of quality of the home environment (0.46 (95% CI: 0.21, 0.72)) and socio-economic status (1.50 (95% CI: 1.03, 1.98)) were positively associated with cognitive development. CONCLUSIONS: Early-onset persistent stunting was associated with lower cognitive development in children at 5 years of age in this cohort of children.</p>	INT	JAN TO JUN	Developmental Paediatrics	<p>PMID:31978156 PMC ID: PMC6980491 WOS:000534599100067 SCOPUS H-INDEX:300 IF: 2.776 BIOXBIO (2018/2019)</p>
11.	<p>Albert, Sandeep and Inja, Dan Barnabas</p> <p>The transmalleolar approach for ankle fusion in Hemophilic arthropathy of the ankle Haemophilia; 2020, 26 56-56</p>	INT	JAN TO JUN	Orthopaedics	<p>WOS:000536674800092 H-INDEX:88 IF: 3.590 BIOXBIO (2018/2019)</p>

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12.	Albert, Sandeep, Inja, Dan Barnabas and Cherian, Vinoo Mathew Staged management of high velocity lower extremity injuries in patients with haemophilia Haemophilia; 2020, 26 57-57	INT	JAN TO JUN	Orthopaedics	WOS:000536674800095 H-INDEX:88 IF: 3.590 BIOXBIO (2018/2019)
13.	Albert, Sandeep, Inja, Dan Barnabas, Nithyananth, Manasseh, Cherian, Vinoo Mathew, Abraham, Aby and Srivastava, Alok Surgical technique of plate assisted knee flexion deformity correction in hemophilic arthropathy of the knee Haemophilia; 2020, 26 54-54	INT	JAN TO JUN	Orthopaedics, Clinical Haematology	WOS:000536674800087 H-INDEX:88 IF: 3.590 BIOXBIO (2018/2019)
14.	Albert, Sandeep, Manasseh, N., Cherian, Vinoo Mathew, Lee, Vernon N., Srivastava, Alok and Abraham, Aby Surgical management of a variety of haemophilic pseudotumours - challenges and precautions Haemophilia; 2020, 26 49-50	INT	JAN TO JUN	Orthopaedics, Clinical Haematology	WOS:000536674800079 H-INDEX:88 IF: 3.590 BIOXBIO (2018/2019)
15.	Albin, C. B., Feema, R., Aparna, L., Darpanarayan, H., Chandran, J. and Abhilash, K. P. Paediatric trauma aetiology, severity and outcome J Family Med Prim Care; 2020, 9 (3): 1583-1588 Address: Department of Emergency Medicine, Christian Medical College, Vellore , Tamil Nadu, India. ED Registrar, Department of Emergency Medicine, Christian Medical College, Vellore , Tamil Nadu, India. Department of Paediatric ICU, Christian Medical College, Vellore , Tamil Nadu, India. BACKGROUND: Paediatric injuries are a major cause of mortality and disability worldwide and account for a significant burden on countries like India with limited resources. There are very few studies from developing nations describing the outcome of paediatric trauma. METHODOLOGY: This retrospective study was done to assess the pattern and outcome of unintentional paediatric trauma in the paediatric population. The patients were categorised into four age groups of <1 year, 1-5 years, 6-10 years and 11-15 years. The data were compared regarding the mode of trauma, new injury severity score (NISS), type of injury and place of injury among different age groups. RESULTS: A total of 1587 paediatric patients below 15 years of age presenting in the Emergency Department of CMC, Vellore were studied over a period of 1 year. Two-thirds were boys (1039: 66.6%). Fall on level ground (28.2%) and road traffic accidents (RTA) (26.5%) were the two most common modes of injury. A gradual change in the place of incident from home to the road with advancing age was noticed. The upper limb (30.8%) and the face (26.2%) were the most common parts of the body to be injured. One-third (35.8%) of the sustained serious injuries was a fracture or a dislocation. RTA (OR: 1.56; 95%CI: 1.08-2.26) and age ≥5 years (OR: 1.17; 95%CI: 1.08-1.26) were found to be	NAT	JAN TO JUN	Emergency Medicine, Paediatric ICU	PMID:32509654 PMC ID: PMC7266214 H-INDEX:NA IF: 0.210 RG (2018/2019)

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	independent predictors of severe injury (NISS >8). Only 15% required hospital admission. CONCLUSION: Fall on level ground and RTAs are the most common modes of injury in the paediatric population. The place of injury shows a gradual change from the confines of home to the open dangerous roads and playgrounds with increasing age with RTA and age ≥5 years being independent predictors of severe injury.				
16.	Alex, A., Lepcha, A., Augustine, A. and Philip, A. An unusual presentation of cerebellar ataxia with bilateral vestibulopathy syndrome: A case report Annals of Indian Academy of Neurology; 2020, 23 (3): 393-395 Address: Department of Audiovestibular Diseases and Implant Otology, ENT Department, Christian Medical College, Vellore , Tamil Nadu, 632 004, India	NAT	JAN TO JUN	Audiology, ENT	SCOPUS H-INDEX:27 IF: 0.898 BIOXBIO (2018/2019)
17.	Alexander, S., Yusuf, S., Rajan, G., Elias John, E., Roy, S., Annamalai, V. C., Thomas, A., Joseph Eapen, J., A. T. Valsan, George David, V. and Varughese, S. Crescentic glomerulonephritis: what's different in South Asia? A single center observational cohort study Wellcome Open Res; 2020, 5 164 Address: Department of Nephrology, Christian Medical College, Vellore , Tamil Nadu, 632004, India. Department of General Pathology, Christian Medical College, Vellore , Tamil Nadu, 632004, India. Background: The spectrum and outcomes of crescentic glomerulonephritis (Cr.GN) in South Asia is vastly different from that reported worldwide and there is a paucity of information. The aim of the study was to study the demography, clinical presentation, histology and predictors of longitudinal outcomes of Cr.GN in this population. Methods: An observational cohort study of renal biopsies was performed in the largest tertiary center in South India over a period of 10 years (January 2006 to December 2015) with ≥50% crescents on renal histology indicating Cr.GN. Results: A total of 8645 kidney biopsies were done; 200 (2.31%) were Cr.GN. Patients were categorized into three etiological groups: anti-glomerular basement membrane (type I), immune complex (type II), and pauci-immune (type III). Type II was the most common (96, 46.5%), followed by type III (73, 38%) and type I (31, 15.5%). Female preponderance was seen across all types. About half of all patients presented with recent onset hypertension. Type II had the highest median proteinuria (4.2 (2.1-6) g/day, p=0.06) and the median estimated glomerular filtration rate was lowest in type I (5 (4-8) ml/min/1.73m (2), p<0.001). Among type III, anti-neutrophil cytoplasmic antibodies (ANCA)-associated vasculitis was seen only in ~50% of patients. Nearly one third of patients with type I were also positive for ANCA making them 'double positive'. Acute glomerular insults like tuft necrosis and chronic changes as evidenced by moderate to severe interstitial fibrosis, was a predominant feature of type I. Conclusions: ANCA-negative pauci-immune vasculitis, as well as double positive	INT	JUL TO DEC	Nephrology, General Pathology	PMID: 32766459 PMC:7385543

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	Cr.GN, are reported for the first time in South-Asia. Renal survival was significantly worse in type I/III compared to type II. Types I/III, moderate to severe interstitial fibrosis and tubular atrophy, presence of oliguria/anuria and increasing percentage of crescents in renal biopsy were significant predictors of end stage kidney disease in our cohort.				
18.	<p>Alexander, T., Thomson, V. S., Malviya, A., Mohan, B., Wander, G. S., Harikrishnan, S., Seth, S., Reddy, S., Arulraj, S., Shah, S., Joshi, S., Tiwaskar, M., Nadkar, M. and Tewary, K.</p> <p>Guidance for health care providers on management of cardiovascular complications in patients suspected or confirmed with COVID 19 virus infection Journal of Association of Physicians of India; 2020, 68 46-49</p> <p>Address: Kovai Medical Center, Coimbatore, Tamil Nadu, India CMC, Vellore, India NEIGRHMS, Shillong, Meghalaya, India DMC Ludhiana, Punjab, India SCTIMST, Trivandrum, Kerala, India AIIMS, New Delhi, India GMCH, Chandigarh, India Sundaram Arulraj Hospitals, Tuticorin, Tamil Nadu, India Bhatia Hospital, Mumbai, Maharashtra, India Lilawati Hospital, Mumbai, Maharashtra, India Asian Heart Institute, Mumbai, Maharashtra, India KEM Hospital, Mumbai, Maharashtra, India Muzaffarpur, Bihar, India</p> <p>As cardiovascular health professionals, this guidance document has been brought out to help fellow physicians manage patients during the COVID-19 pandemic. © 2020 Journal of Association of Physicians of India. All rights reserved.</p>	NAT	JAN TO JUN	Cardiology	<p>SCOPUS H-INDEX:56 IF: 0.340 RG (2018/2019)</p>
19.	<p>Alexander, V., Shenoy, R., Korula, A. and Koshy, M.</p> <p>Intramuscular lymphoma: uncommon presentation of Hodgkin's disease BMJ case reports; 2020, 13 (8): Address: Internal Medicine, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India vijayalexander@cmcvellore.ac.in.</p> <p>Internal Medicine, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. Hematology, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India.</p> <p>Extranodal presentation in lymphoproliferative disorders is a well-recognised entity. However, musculoskeletal involvement is extremely rare. We describe the case of a 64-year-old farmer who presented to us with constitutional symptoms of fever, loss of weight and loss of appetite for 2 years and physical examination revealing generalised lymphadenopathy with hepatosplenomegaly. Biopsy of an axillary lymph node showed mixed cellularity variant of Hodgkin's lymphoma. CT</p>	INT	JUL TO DEC	Internal Medicine, Hematology	<p>PMID: 32847868 PMC:7451531</p>

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	of the thorax and abdomen revealed a collection in the right psoas muscle. Guided biopsy of the psoas deposit was suggestive of Hodgkin's lymphoma. PCR and cultures for Mycobacterium tuberculosis tested negative. Here we describe a rare presentation of Hodgkin's lymphoma with intramuscular involvement.				
20.	<p>Algwaiz, G., Aljurf, M., Koh, M., Horowitz, M. M., Ljungman, P., Weisdorf, D., Saber, W., Kodera, Y., Szer, J., Jawdat, D., Wood, W. A., Brazauskas, R., Lehmann, L., Pasquini, M. C., Seber, A., Lu, P. H., Atsuta, Y., Riches, M., Perales, M. A., Worel, N., Okamoto, S., Srivastava, A., Chemaly, R. F., Cordonnier, C., Dandoy, C. E., Wingard, J. R., Kharfan-Dabaja, M. A., Hamadani, M., Majhail, N. S., Waghmare, A. A., Chao, N., Kroger, N., Shaw, B., Mohty, M., Niederwieser, D., Greinix, H., Hashmi, S. K., Wbmt and Com, Cibmtr Hlth Serv Int Studies</p> <p>Real-World Issues and Potential Solutions in Hematopoietic Cell Transplantation during the COVID-19 Pandemic: Perspectives from the Worldwide Network for Blood and Marrow Transplantation and Center for International Blood and Marrow Transplant Research Health Services and International Studies Committee</p> <p>Biology of Blood and Marrow Transplantation; 2020, 26 (12): 2181-2189</p> <p>Address: [Algwaiz, Ghada] King Faisal Specialist Hosp & Res Ctr, Dept Med, Riyadh, Saudi Arabia. [Aljurf, Mahmoud; Hashmi, Shahrukh K.] King Faisal Specialist Hosp & Res Ctr, Dept Adult Hematol & Stem Cell Transplant, Riyadh, Saudi Arabia. [Koh, Mickey] St Georges Hosp & Med Sch, Dept Haematol, London, England. [Koh, Mickey] Hlth Sci Author, Blood Serv Grp, Cell Therapy Facil, Singapore, Singapore. [Horowitz, Mary M.; Saber, Wael; Pasquini, Marcelo C.; Hamadani, Mehdi; Shaw, Bronwen] Med Coll Wisconsin, Div Hematol Oncol, Milwaukee, WI 53226 USA. [Ljungman, Per] Karolinska Univ Hosp Huddinge, Dept Cellular Therapy & Allogene Stem Cell Transp, Stockholm, Sweden. [Ljungman, Per] Karolinska Inst, Dept Med Huddinge, Div Hematol, Stockholm, Sweden. [Weisdorf, Daniel] Univ Minnesota, Dept Med, Div Hematol Oncol & Transplantat, Box 736 UMHC, Minneapolis, MN 55455 USA. [Kodera, Yoshihisa; Atsuta, Yoshiko] Aichi Med Univ Hosp, Ctr Hematopoiect Stem Cell Transplantat, Nagakute, Aichi, Japan. [Szer, Jeff] Peter MacCallum Canc Ctr, Clin Haematol, Melbourne, Vic, Australia. [Szer, Jeff] Royal Melbourne Hosp, Melbourne, Vic, Australia. [Jawdat, Dunia] Minist Natl Guard Hlth Affairs, Coll Sci & Hlth Profess, King Abdullah Int Med Res Ctr, King Saud Bin Abdulaziz Univ Hlth Sci, Cord Blood, Riyadh, Saudi Arabia. [Wood, William A.; Riches, Marcie] Univ N Carolina, Lineberger Comprehens Canc Ctr, Div Hematol, Chapel Hill, NC 27515 USA. [Brazauskas, Ruta] Med Coll Wisconsin, Div Biostat, Milwaukee, WI 53226 USA. [Lehmann, Leslie] Dana Farber Canc Inst, Dept Pediat Hematol Oncol, Boston, MA 02115 USA. [Seber, Adriana] Univ Fed Sao Paulo, Dept Med, Escola Paulista Med, Sao Paulo, Brazil. [Lu, Pei Hua] Hebei Yanda Ludaopei Hosp, Hematol & Oncol Dept, Langfang, Peoples R China. [Perales, Miguel-Angel] Mem Sloan Kettering Canc Ctr, Dept Med, Adult Bone Marrow Transplantat Serv, 1275 York Ave, New York, NY 10021 USA. [Perales, Miguel-Angel] Weill Cornell Med Coll, New York, NY USA. [Worel, Nina] Med Univ Vienna, Dept Blood Grp Serol & Transfus Med, Vienna, Austria. [Okamoto, Shinichiro] Keio Univ, Dept Med, Div</p>	INT	JUL TO DEC	Clinical Hematology	WOS:000594542200012

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Hematol, Sch Med, Tokyo, Japan. [Srivastava, Alok] Christian Med Coll & Hosp, Dept Haematol, Vellore, Tamil Nadu, India. [Chemaly, Roy F.] Univ Texas MD Anderson Canc Ctr, Dept Infect Dis Infect Control & Employee Hlth, Houston, TX 77030 USA. [Cordonnier, Catherine] Henri Mondor Hosp, Hematol Dept, Creteil, France. [Cordonnier, Catherine] Univ Paris Est Creteil, Creteil, France. [Dandoy, Christopher E.] Univ Cincinnati, Dept Pediat, Cincinnati Childrens Hosp Med Ctr, Bone Marrow Transplantat & Immune Deficiency, Cincinnati, OH USA. [Wingard, John R.] Univ Florida, Dept Med, Div Hematol & Oncol, Gainesville, FL USA. [Kharfan-Dabaja, Mohamed A.] Mayo Clin, Div Hematol Oncol, Jacksonville, FL 32224 USA. [Majhail, Navneet S.] Cleveland Clin, Blood & Marrow Transplant Program, Cleveland, OH 44106 USA. [Waghmare, Alpna A.] Univ Washington, Dept Pediat, Div Pediat Infect Dis, Seattle, WA 98195 USA. [Waghmare, Alpna A.] Fred Hutchinson Canc Res Ctr, Vaccine & Infect Dis Div, 1124 Columbia St, Seattle, WA 98104 USA. [Chao, Nelson] Duke Univ, Duke Canc Inst, Med Ctr, Durham, NC USA. [Kroger, Nicolaus] Univ Hosp Hamburg Eppendorf, Dept Stem Cell Transplantat, Hamburg, Germany. [Mohty, Mohamad] Sorbonne Univ, INSERM UMRS 938, Hop St Antoine, Serv Hematol Clin & Therapie Cellulaire, Paris, France. [Niederwieser, Dietger] Univ Leipzig, Div Hematol & Med Oncol, Leipzig, Germany. [Greinix, Hildegard] Med Univ Graz, Div Hematol, Graz, Austria. [Hashmi, Shahrukh K.] Mayo Clin, Dept Internal Med, Rochester, MN USA.</p> <p>Aljurf, M (corresponding author), King Faisal Specialist Hosp & Res Ctr, Dept Adult Hematol & Stem Cell Transplant, Riyadh, Saudi Arabia.; Aljurf, M (corresponding author), Zahrawi St, Riyadh 12713, Saudi Arabia. maljurf@kfshrc.edu.sa</p> <p>The current COVID-19 pandemic, caused by SARS-CoV-2, has impacted many facets of hematopoietic cell transplantation (HCT) in both developed and developing countries. Realizing the challenges as a result of this pandemic affecting the daily practice of the HCT centers and the recognition of the variability in practice worldwide, the Worldwide Network for Blood and Marrow Transplantation (WBMT) and the Center for International Blood and Marrow Transplant Research's (CIBMTR) Health Services and International Studies Committee have jointly produced an expert opinion statement as a general guide to deal with certain aspects of HCT, including diagnostics for SARS-CoV-2 in HCT recipient, pre- and post-HCT management, donor issues, medical tourism, and facilities management. During these crucial times, which may last for months or years, the HCT community must reorganize to proceed with transplantation activity in those patients who urgently require it, albeit with extreme caution. This shared knowledge may be of value to the HCT community in the absence of high-quality evidencebased medicine. (C) 2020 American Society for Transplantation and Cellular Therapy. Published by Elsevier Inc.</p>				
21.	Aljurf, M., Weisdorf, D., Hashmi, S. K., Nassar, A., Gluckman, E., Mohty, M., Rizzo, D., Pasquini, M., Hamadani, M., Saber, W., Hari, P., Kharfan-Dabaja, M., Majhail, N., Gerges, U., Ali Hamidieh, A., Hussain, F., Elhaddad, A., Mahmoud, H. K., Tbakhi, A.,	INT	JAN TO JUN	Centre for Stem Cell Research	SCOPUS H-INDEX:19 IF: 1.170 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Othman, T. B., Hamladji, R. M., Bekadja, M. A., Ahmed, P., Bazarbachi, A., Adil, S., Alkindi, S., Ladeb, S., Dennison, D., Patel, M., Lu, P., Quessar, A. E., Okamoto, S., Atsuta, Y., Alhejazi, A., Ayas, M., Ahmed, S. O., Novitzky, N., Srivastava, A., Seber, A., Elsolh, H., Ghavamzadeh, A., Confer, D., Kodera, Y., Greinix, H., Szer, J., Horowitz, M. and Niederwieser, D.</p> <p>Worldwide Network for Blood and Marrow Transplantation (WBMT) recommendations for establishing a hematopoietic stem cell transplantation program in countries with limited resources (Part II): Clinical, technical and socio-economic considerations Hematology/ Oncology and Stem Cell Therapy; 2020, 13 (1): 7-16</p> <p>Address: Hematology Department, King Faisal Specialist Hospital & Research Centre, Riyadh, Saudi Arabia University of Minnesota, Minneapolis, MN, United States Department of Medicine, Mayo Clinic, Rochester, MN, United States National Cancer Institute, Cairo University, Cairo, Egypt Eurocord Hôpital Saint-Louis and University Paris Diderot, Paris, France Hopital Saint-Antoine, Sorbonne University, Paris, France Center for International Blood and Marrow Transplant Research (CIBMTR), Milwaukee, WI, United States Department of Medicine, Division of Hematology-Oncology and Blood and Marrow Transplantation Program, Mayo Clinic, Jacksonville, FL, United States Blood and Marrow Transplant Program, Cleveland Clinic, Cleveland, OH, United States Hematologic Malignancies & Bone Marrow Transplant, Department of Medical Oncology, New York-Presbyterian Hospital/Weill Cornell Medical Center, New York, United States Tehran University of Medical Sciences, Hematology, Oncology & SCT Research Ctr., Tehran, Iran King Hussein Cancer Center, Amman, Jordan Center National de Greffe de Moelle Osseuse de Tunis, Tunis, Tunisia Pierre and Marie Curie Center, Algiers, Algeria University Hospital Establishment 1st Nov, Oran, Algeria Armed Forces Institute of Transplantation, Rawalpindi, Pakistan Hematology/Oncology, American University of Beirut Medical Center, Beirut, Lebanon Aga Khan University Hospital, Karachi, Pakistan Sultan Qaboos University Hospital, Muscat, Oman University of the Witwatersrand, Johannesburg, South Africa Hebei Yanda Ludaopei Hospital, Langfang, China Hôpital 20 Août, Casablanca, Morocco Japanese Data Center for Hematopoietic Cell Transplantation, Nagoya, Japan Keio University School of Medicine, Tokyo, Japan King Abdulaziz Medical City, NGH, Riyadh, Saudi Arabia</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>African Blood & Marrow Transplantation Society (AFBMT), South Africa Christian Medical College & Hospital, Bagayam, Vellore, India Instituto de Oncologia Pediatrica, Sao Paulo, Brazil Center for Hematopoietic Stem Cell Transplantation, Aichi Medical University Hospital, Nagakute, Japan Medical University of Graz, LKH-Univ. Klinikum Graz, Austria Department of Clinical Haematology, Royal Melbourne Hospital VIC 3050, Australia Department of Hematology and Medical Oncology, University Hospital, Leipzig, Germany</p> <p>The development of hematopoietic stem cell transplantation (HSCT) programs can face significant challenges in most developing countries because such endeavors must compete with other government health care priorities, including the delivery of basic services. While this is may be a limiting factor, these countries should prioritize development of the needed expertise to offer state of the art treatments including transplantation, by providing financial, technological, legal, ethical and other needed support. This would prove beneficial in providing successful programs customized to the needs of their population, and potentially provide long-term cost-savings by circumventing the need for their citizens to seek care abroad. Costs of establishing HSCT program and the costs of the HSCT procedure itself can be substantial barriers in developing countries. Additionally, socioeconomic factors intrinsic to specific countries can influence access to HSCT, patient eligibility for HSCT and timely utilization of HSCT center capabilities. This report describes recommendations from the Worldwide Network for Blood and Marrow Transplantation (WBMT) for establishing HSCT programs with a specific focus on developing countries, and identifies challenges and opportunities for providing this specialized procedure in the resource constrained setting. © 2020 The Authors</p>				
22.	<p>Al-Sani, F., Prasad, S., Panwar, J., Stimec, J., Khosroawshahi, A., Mizzi, T., Camp, M., Colaco, K., Kramer, A. and Boutis, K. Adverse Events from Emergency Physician Pediatric Extremity Radiograph Interpretations: A Prospective Cohort Study Academic Emergency Medicine; 2020, 27 (2): 128-138</p> <p>Address: Division of Pediatric Emergency Medicine, Department of Pediatrics, Royal University Hospital, University of Saskatchewan, Saskatoon, SK, Canada Division of Pediatric Emergency Medicine, Department of Pediatrics, Hospital for Sick Children, Toronto, ON, Canada Department of Radiology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India Department of Diagnostic Imaging, Hospital for Sick Children and University of Toronto, Toronto, ON, Canada Division of Orthopedic Surgery, Department of Surgery, Child Health Evaluative</p>	INT	JAN TO JUN	Emergency Medicine	<p>SCOPUS H-INDEX:117 IF: 2.963 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Sciences, Research Institute, Hospital for Sick Children and University of Toronto, Toronto, ON, Canada Faculty of Medicine, University of British Columbia, Vancouver, BC, Canada Division of Pediatric Emergency Medicine, Department of Pediatrics, Child Health Evaluative Sciences, Research Institute, Hospital for Sick Children and University of Toronto, Toronto, ON, Canada</p> <p>Objectives: We determined how often emergency physician pediatric musculoskeletal (MSK) radiograph interpretations were discordant to that of a radiologist and led to an adverse event (AE). We also established the variables independently associated with this outcome. Methods: This prospective cohort study was conducted in an urban, tertiary care children's emergency department (ED). We enrolled children who presented to an ED with an extremity injury and received radiographs. ED physicians documented their radiograph interpretation, which was compared to a radiology reference standard. Patients received telephone follow-up and had institutional medical records reviewed in 3 weeks. An AE occurred if there were clinical sequelae and/or repeat health care visits due to a delay in correct radiograph interpretation. Results: We enrolled 2,302 children (mean [±SD] age = 9.0 [4.4] years; 1,288 (56.0%) male). Of these, 180 (7.8%; 95% confidence interval = 6.8 to 9.0) ED physician discordant interpretations resulted in an AE. Specifically, there were no negative clinical outcomes; however, relative to cases diagnosed correctly at the index ED, patients whose fracture was not initially identified encountered 77.2% more subsequent ED visits, while those falsely diagnosed with a fracture experienced 41.5% additional orthopedic clinic visits. Odds of an ED discrepant interpretation was significantly higher if a physician's pretest probability of a fracture was ≤ 20% versus > 20% (adjusted odds ratio [aOR] = 1.6), patient's pain score was ≤ 2 versus > 2 (aOR = 1.6), and injury was located in a joint versus other location (aOR = 1.7). Conclusions: Emergency physician discordant pediatric MSK radiograph interpretations that resulted in an AE occurred with regular frequency in a pediatric ED setting. AEs were primarily an increase in subsequent health care visits. Importantly, a low clinical suspicion for a fracture or injury located in the joint were risk factors for ED physician discordant interpretations. © 2019 by the Society for Academic Emergency Medicine</p>				
23.	<p>Alturkistani, R., Kavin, A., Devasahayam, S., Thomas, R., Colombini, E. L., Cifuentes, C. A., Homer-Vanniasinkam, S., Wurdemann, H. A. and Moazen, M. Affordable passive 3D-printed prosthesis for persons with partial hand amputation Prosthetics and Orthotics International; 2020, 44 (2): 92-98</p> <p>Address: [Alturkistani, Raghad; Homer-Vanniasinkam, Shervanthi; Wurdemann, Helge A.; Moazen, Mehran] UCL, Dept Mech Engr, Torrington Pl, London WC1E 7JE, England. [Kavin, A.; Devasahayam, Suresh; Thomas, Raji] Christian Med Coll Vellore, Vellore, Tamil Nadu, India. [Colombini, Esther L.] Univ Estadual</p>	INT	JAN TO JUN	Physical Medicine Rehabilitation	WOS:000516692600001 SCOPUS H-INDEX:49 IF: 1.482 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Campinas, Inst Comp, Campinas, Brazil. [Cifuentes, Carlos A.] Colombian Sch Engn Julio Garavito, Dept Biomed Engn, Bogota, Colombia. Moazen, M (reprint author), UCL, Dept Mech Engn, Torrington Pl, London WC1E 7JE, England. M.Moazen@ucl.ac.uk</p> <p>Background and Aim: Partial hand amputations are common in developing countries and have a negative impact on patients and their families' quality of life. The uniqueness of each partial hand amputation, coupled with the relatively high costs of prostheses, makes it challenging to provide suitable prosthetic solutions in developing countries. Current solutions often have long lead times and require a high level of expertise to produce. The aim of this study was to design and develop an affordable patient-specific partial hand prosthesis for developing countries. Technique: The prosthesis was designed for a patient with transmetacarpal amputation (i.e. three amputated fingers and partial palm). The final design was passive, controlled by the contralateral hand, and utilized the advanced flexibility properties of thermoplastic polyurethane in a glove-like design that costs approximately 20 USD to fabricate. Quantitative and qualitative tests were conducted to assess performance of the device after the patient used the final design. A qualitative assessment was performed to gather the patient's feedback following a series of tests of grasp taxonomy. A quantitative assessment was performed through a grasp and lift test to measure the prosthesis' maximum load capacity. Discussion: This study showed that the prosthesis enhanced the patient's manual handling capabilities, mainly in the form of grasp stability. The prosthesis was light weight and could be donned and doffed by the patient independently. Limitations include the need to use the contralateral hand to achieve grasping and low grasp strength.</p>				
24.	<p>Ambekar, A., Rao, V., Pai, S. A., Bindhu, M. R., Midha, D., Kaushal, S., Patil, S., Jagdale, R., Soni, S., Kulkarni, B., Sundaram, S., Kumar, R. M., Desai, S. and Menon, S. Grossing and reporting of testicular tumor specimens: An evidence-based approach Indian Journal of Cancer; 2020, 57 (1): 7-12</p> <p>Address: [Ambekar, Asawari] Apollo Hosp, Dept Pathol, Navi Mumbai, Maharashtra, India. [Rao, Vishal] Basavatarakam Indo Amer Canc Hosp & Res Inst, Dept Pathol, Hyderabad, Telangana, India. [Pai, Sanjay A.] Columbia Asia Referral Hosp, Dept Pathol, Bangalore, Karnataka, India. [Bindhu, M. R.] Amrita Inst Med Sci, Dept Pathol, Kochi, Kerala, India. [Midha, Divya] Tata Med Ctr, Kolkata, W Bengal, India. [Kaushal, Seema] All India Inst Med Sci, Dept Pathol, New Delhi, India. [Patil, Sachin; Jagdale, Rakhi] Shri Siddhivinayak Ganapati Canc Hosp, Dept Pathol, Miraj, Maharashtra, India. [Soni, Shailesh] Muljibhai Patel Urol Hosp, Dept Pathol, Nadiad, Gujarat, India. [Kulkarni, Bijal] Kokilaben Dhirubhai Ambani Hosp & Res Ctr, Dept Pathol, Mumbai, Maharashtra, India. [Sundaram, Sandhya] Sri Ramachandra Inst Higher Educ & Res, Dept Pathol, Chennai, Tamil Nadu, India. [Kumar, Ramani</p>	NAT	JAN TO JUN	General Pathology	<p>WOS:000519237100004 SCOPUS H-INDEX:36 IF: 0.429 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Manoj] Christian Med Coll & Hosp, Dept Pathol, Vellore, Tamil Nadu, India. [Desai, Sangeeta; Menon, Santosh] Tata Mem Hosp, Homi Bhabha Natl Inst, Dept Pathol, Mumbai, Maharashtra, India. Menon, S (reprint author), Tata Mem Hosp, Homi Bhabha Natl Inst, Dept Pathol, Mumbai, Maharashtra, India. mensantosh@gmail.com</p> <p>The majority of testicular tumors are germ cell tumors (GCTs), but there are numerous other types, making testicular tumors one of the most diverse areas of human pathology, despite their relative rarity. Testicular tumors are usually diagnosed only after radical surgery, as biopsies are not performed. Further management of the patient is dependent on the diagnosis at microscopy, which itself is based on the sections taken at the time of grossing the specimen. Many pathologists often aren't well versed with guidelines for handling of orchiectomy specimens and for microscopy. This article discusses, in detail, the approach to grossing of a testicular tumour specimen and elaborates of the reasons as to why we do what we do at the initial "cut-up". It explains the logic behind the reporting guidelines for testicular tumors and offer a clinical primer to the pathologist as to why we do what we do while grossing testicular tumor specimens.</p>				
25.	<p>Amirtham, S. M., Ozbey, O., Kachroo, U., Ramasamy, B. and Vinod, E. Optimization of immunohistochemical detection of collagen type II in osteochondral sections by comparing decalcification and antigen retrieval agent combinations Clinical Anatomy; 2020, 33 (3): 343-349</p> <p>Address: [Amirtham, Soosai Manickam; Kachroo, Upasana; Vinod, Elizabeth] Christian Med Coll & Hosp, Dept Physiol, Vellore 632002, Tamil Nadu, India. [Ozbey, Ozlem] Akdeniz Univ, Sch Med, Dept Histol & Embryol Campus, TR-07070 Antalya, Turkey. [Ramasamy, Boopalan] Royal Darwin Hosp, Dept Orthpaed, 105 Rocklands Dr, Tiwi, NT 0810, Australia. [Vinod, Elizabeth] Christian Med Coll & Hosp, Ctr Stem Cell Res, Vellore 632002, Tamil Nadu, India. Kachroo, U (reprint author), Christian Med Coll & Hosp, Dept Physiol, Vellore 632002, Tamil Nadu, India. upasana_k@hotmail.com</p> <p>Bone containing tissues such as osteochondral joint are resistant to routine tissue processing, therefore require decalcification. This technique causes removal of mineral salts, but in the process may macerate the organic tissue, hence the need for tissue fixation. Such severe processing demands careful antigen retrieval to necessitate optimal staining. The aim of our study was to compare five different antigen retrieval protocols (heat retrieval and protein digestion) following decalcification of rabbit knee joints using two different techniques (20% formic acid and 10% ethylenediamine-tetra acetic acid: EDTA). Osteochondral sections were compared based on time required for decalcification, ease of sectioning, morphological integrity using HE staining and antigen preservation (Collagen type</p>	INT	JAN TO JUN	Physiology, Centre for Stem Cell Research	<p>WOS:000518419500006 SCOPUS H-INDEX:66 IF: 1.813 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	II) using immunohistochemistry. The two decalcification solutions did not impair the tissue morphology and ease of sectioning. Joints processed with formic acid decalcified four times faster than EDTA. Among the five antigen retrieval approaches, maximal collagen II uptake with minimal nonspecific staining was found with protein digestion (pronase and hyaluronidase) in both formic acid and EDTA sections. For osteo-chondral sections, we recommend using 10% EDTA for decalcification and pronase plus hyaluronidase for antigen retrieval if maintaining tissue morphology is crucial, whereas if time is of the essence, 20% FA with pronase plus hyaluronidase is the faster option while still preserving structural integrity. Clin. Anat. 33:343-349, 2020. (c) 2019 Wiley Periodicals, Inc.				
26.	<p>Amladi, A., Lal, Y. B., Jacob, J. J., Anandan, S. and Veeraraghavan, B. Draft genome sequence of carbapenem-resistant Elizabethkingia anophelis strain BP8467 clinical isolate from India J Glob Antimicrob Resist; 2020, 21 200-202</p> <p>Address: Department of Clinical Microbiology, Christian Medical College and Hospital, Vellore 632004, Tamil Nadu, India. Department of Clinical Microbiology, Christian Medical College and Hospital, Vellore 632004, Tamil Nadu, India. Electronic Address: vbajaj@cmcvellore.ac.in.</p> <p>OBJECTIVES: Elizabethkingia spp. are Gram-negative, glucose-non-fermenting bacilli that are ubiquitous in natural environments such as soil, plant and water sources. Besides environmental sources, the bacterium can be found in hospital environments, particularly medical equipment and reagents. Here we report the draft genome sequence of an Elizabethkingia anophelis isolate from a blood culture. METHODS: Genomic DNA of E. anophelis strain BP8467 was sequenced on an Ion Torrent PGM platform and the reads were assembled de novo using SPAdes v.5.0.0. The draft genome was annotated using the Prokaryotic Genome Annotation Pipeline (PGAP) v.4.9. Genetic determinants of antimicrobial resistance as well as virulence factors were identified using computational tools. RESULTS: The assembled draft genome is 3859105bp in length with a G+C content of 35.62% distributed in 30 contigs. Presence of the bla(BlaB) and bla(GOB-4) genes associated with resistance to carbapenems was identified. In addition, genes conferring resistance to other β-lactams (bla(CME-1)), aminoglycosides [ant(6)-I] and chloramphenicol (catB) were also detected. Antimicrobial susceptibility testing showed that the isolate was susceptible to levofloxacin, trimethoprim/sulfamethoxazole, tetracycline and rifampicin. CONCLUSION: The presence of a multidrug-resistant isolate harbouring diverse antimicrobial resistance genes along with numerous virulence factors suggests the risk associated with Elizabethkingia spp. infections. This genome analysis provides insights into the antimicrobial resistance and pathogenicity mechanisms of multidrug-resistant E. anophelis that can help in the management of Elizabethkingia spp. infections in the future.</p>	INT	JAN TO JUN	Clinical Microbiology	<p>PMID:32330579 SCOPUS H-INDEX:20 IF: 0.910 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
27.	<p>Amritanand, A., Paul, P., Nagarajan, S. G., Doss, P. A., Yovan, P. and John, S. Accuracy of Trained Community-based Rehabilitation Volunteers in Identification and Appropriate Referral of Adults with Perceived Visual Disability in an Urban-slum Setting in Southern India Ophthalmic Epidemiol; 2020, 27 (5): 344-353</p> <p>Address: Department of Ophthalmology, Christian Medical College, Vellore, India. Physical Medicine and Rehabilitation Department, Christian Medical College, Vellore, India. Low Cost Effective Care Unit, Christian Medical College, Vellore, India.</p> <p>Purpose: The integration of primary eyecare into existing primary healthcare systems requires simple yet effective tools that do not overburden the grass-root level worker. The objective of this study was to test the accuracy of a questionnaire-based tool administered by trained community-based rehabilitation volunteers (CBRVs) in identifying persons with visual disability, proportions accessing referral pathway and barriers to uptake of eyecare services. Methods: CBRVs working in the urban-slum service area of a teaching hospital were trained in administering a questionnaire-based tool derived from the World Health Organization (WHO) "Training in the community for people with disabilities" to a responsible adult member of the household. Post-training, they screened and referred adults with perceived visual problems. This tool was tested against two reference standards: (i) history of visual disability elicited by ophthalmologist; (ii) pre-set visual acuity and diagnosis criteria. Results: Ten CBRVs screened 950 individuals of whom 805 (84.7%) were examined by an optometrist and ophthalmologist. Sensitivity and specificity of this method were 75% (95% CI 72-78%), 95.8% (95% CI 94-98%) respectively, using history and 60.2% (95% CI 57-63%), 91.8% (95% CI 90-94%) using clinical criteria as reference standard. Referral pathway was used by 91/221 (41.2%) referred individuals. The commonest barriers to accessing eye care were 'did not feel the need' (32.2%) and 'busy with work/household responsibilities' (30.2%). Conclusions: This questionnaire-based tool administered by grass-root level health workers to a responsible adult member of the family may be a promising screening method for identification and appropriate referral of persons with visual disability in the community.</p>	INT	JAN TO JUN	Ophthalmology, Physical Medicine and Rehabilitation, Low Cost Effective Care Unit	<p>PMID:32351148 WOS:000532094900001 SCOPUS H-INDEX:61 IF: 0.960 RG (2018/2019)</p>
28.	<p>Amritanand, R., Arockiaraj, J., David, K. S. and Krishnan, V. Does the Surgical Reduction of High Grade Spondylolisthesis Restore Spino-Pelvic Alignment? An Analysis of 35 Patients Asian Spine J; 2020, Address: Spinal Disorder Surgery Unit, Department of Orthopaedics, Christian Medical College & Hospital, Vellore, India. STUDY DESIGN: Retrospective case series. PURPOSE: This study aimed to analyze how the sagittal spinopelvic alignment is influenced by an attempted surgical</p>	INT	JUL TO DEC	Spinal Disorder Surgery Unit, Orthopaedics,	PMID: 33189106

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	reduction of the L5-S1 segment in patients with high-grade spondylolisthesis (HGS). OVERVIEW OF LITERATURE: Conventional treatment strategies stress the importance of achieving fusion across the lumbosacral junction in patients with HGS. The role of reduction in this subset of patients is controversial. METHODS: This is a retrospective case series of 35 patients with Meyerding grades III, IV, or V spondylolisthesis who underwent surgical treatment in our institution. Before and after surgery, we took standing lateral radiographs from L1 vertebra to pelvis, including the femoral heads, and measured the slip grade, pelvic incidence, sacral slope, pelvic tilt, lumbosacral angle, and lumbar lordosis. Patients were subdivided into "balanced" and "unbalanced" pelvis groups. To determine the effect and correlation of reduction on these spinopelvic parameters, we statistically compared the pre- and postoperative measurements. RESULTS: The average follow-up was 9 months (range, 3-169 months). Slip grade improved from an average 74.0%±13.2% to 30.0%±14.0% (p<0.001), and lumbosacral angle reduced from an average 32.0°±11.6° to 6.0°±0.6° (p<0.001). Although the pelvic tilt was reduced, this was not significant. There was a modest negative correlation between the reduction in slip grade and the increase in sacral slope (r=-0.3, p=0.06). At follow-up, five patients improved, from an unbalanced pelvis to a balanced pelvis. Fusion occurred in 33 patients (95%). CONCLUSIONS: Surgical reduction of HGS restores the lumbosacral alignment. However, a similar trend is not noted with the pelvic parameters.				
29.	Anand, A. C., Nandi, B., Acharya, S. K., Arora, A., Babu, S., Batra, Y., Chawla, Y. K., Chowdhury, A., Chaoudhuri, A., Eapen, E. C., Devarbhavi, H., Dhiman, R., Datta Gupta, S., Duseja, A., Jothimani, D., Kapoor, D., Kar, P., Khuroo, M. S., Kumar, A., Madan, K., Mallick, B., Maiwall, R., Mohan, N., Nagral, A., Nath, P., Panigrahi, S. C., Pawar, A., Philips, C. A., Prahraj, D., Puri, P., Rastogi, A., Saraswat, V. A., Saigal, S., Shalimar, Shukla, A., Singh, S. P., Verghese, T., Wadhawan, M. and The, Inasl Task-Force on Acute Liver Failure Indian National Association for the Study of the Liver Consensus Statement on Acute Liver Failure (Part 1): Epidemiology, Pathogenesis, Presentation and Prognosis Journal of Clinical and Experimental Hepatology; 2020, Address: Department of Gastroenterology, Kaliga Institute of Medical Sciences, Bhubaneswar, 751024, India Department of Gastroenterology, Sarvodaya Hospital and Research Centre, Faridababd, Haryana, India Department of Gastroenterology and Hepatology, KIIT University, Patia, Bhubaneswar, Odisha 751 024, India Institute of Liver Gastroenterology & Pancreatico Biliary Sciences, Sir Ganga Ram Hospital, Rajinder Nagar, New Delhi, 110 060, India Department of Gastroenterology, Krishna Institute of Medical Sciences, Hyderabad, 500003, India Department of Gastroenterology, Indraprastha Apollo Hospital, SaritaVihar, New	INT	JAN TO JUN	Hepatology	SCOPUS H-INDEX:29 IF: 0.130 RG (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Delhi, 110 076, India Department of Gastroenterology, Kalinga Institute of Medical Sciences (KIMS), Kushabhadra Campus (KIIT Campus-5), Patia, Bhubaneswar, Odisha 751 024, India Department of Hepatology, School of Digestive and Liver Diseases, Institute of Post Graduate Medical Education & Research, Kolkata, 700020, India Hepatology and Liver Transplant, Institute of Liver & Biliary Sciences, D-1 Vasant Kunj, New Delhi, India Department of Hepatology, Christian Medical College, Vellore, India Department of Gastroenterology and Hepatology, St. John's Medical College Hospital, Bangalore, 560034, India Department of Hepatology, Post graduate Institute of Medical Education and Research, Chandigarh, 160 012, India Department of Pathology, All India Institute of Medical Sciences, Ansari Nagar, New Delhi, 110 029, India Institute of Liver Disease and Transplantation, Dr Rela Institute and Medical Centre, Chrompet, Chennai, 600044, India Gleneagles Global Hospitals, Hyderabad, Telangana, India Department of Gastroenterology and Hepatology, Max Super Speciality Hospital, Vaishali, Ghaziabad, Uttar Pradesh 201 012, India Department of Gastroenterology, Dr Khuroo' S Medical Clinic, Srinagar, Kashmir, India Gastroenterology and Hepatology, Max Smart Super Specialty Hospital, Saket, New Delhi, India Department of Gastroenterology, Kalinga Institute of Medical Sciences, Bhubaneswar, 751024, India Hepatology Incharge Liver Intensive Care, Institute of Liver & Biliary Sciences, D-1 Vasant Kunj, New Delhi, India Department of Pediatric Gastroenterology, Hepatology & Liver Transplantation, Medanta – the Medicity Hospital, Sector – 38, Gurgaon, Haryana, India Department of Gastroenterology, Apollo and Jaslok Hospital & Research Centre, 15, Dr Deshmukh Marg, Pedder Road, Mumbai, Maharashtra 400 026, India Liver & Digestive Diseases Institute, Fortis Escorts Hospital, Okhla Road, New Delhi, 110 025, India The Liver Unit and Monarch Liver Lab, Cochin Gastroenterology Group, Ernakulam Medical Centre, Kochi, Kerala 682028, India Department of Hepatology and Gastroenterology, Fortis Escorts Liver & Digestive Diseases Institute (FELDI), Fortis Escorts Hospital, Delhi, India Department of Liver Transplantation, Medanta – the MedicityHospital, Sector – 38, Gurgaon, Haryana, India Department of Gastroenterology, Sanjay Gandhi Post Graduate Institute of Medical Sciences, Raibareli Road, Lucknow, Uttar Pradesh 226 014, India Department of Hepatology, Department of Liver Transplantation, India Department of Gastroenterology and Human Nutrition Unit, All India Institute of Medical Sciences, New Delhi, 29, India</p>				

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	<p>Department of Gastroenterology, LTM Medical College & Sion Hospital, India Department of Gastroenterology, SCB Medical College, Cuttack, Dock Road, Manglabag, Cuttack, Odisha 753 007, India Department of Gastroenterology, Government Medical College, Kozikhode, India Institute of Liver & Digestive Diseases and Head of Hepatology & Liver Transplant (Medicine), BLK Super Speciality Hospital, Delhi, India</p> <p>Acute liver failure (ALF) is an infrequent, unpredictable, potentially fatal complication of acute liver injury (ALI) consequent to varied etiologies. Etiologies of ALF as reported in the literature have regional differences, which affects the clinical presentation and natural course. In this part of the consensus article designed to reflect the clinical practices in India, disease burden, epidemiology, clinical presentation, monitoring, and prognostication have been discussed. In India, viral hepatitis is the most frequent cause of ALF, with drug-induced hepatitis due to antituberculosis drugs being the second most frequent cause. The clinical presentation of ALF is characterized by jaundice, coagulopathy, and encephalopathy. It is important to differentiate ALF from other causes of liver failure, including acute on chronic liver failure, subacute liver failure, as well as certain tropical infections which can mimic this presentation. The disease often has a fulminant clinical course with high short-term mortality. Death is usually attributable to cerebral complications, infections, and resultant multiorgan failure. Timely liver transplantation (LT) can change the outcome, and hence, it is vital to provide intensive care to patients until LT can be arranged. It is equally important to assess prognosis to select patients who are suitable for LT. Several prognostic scores have been proposed, and their comparisons show that indigenously developed dynamic scores have an edge over scores described from the Western world. Management of ALF will be described in part 2 of this document. © 2020 Indian National Association for Study of the Liver</p>				
30.	<p>Anand, A. C., Nandi, B., Acharya, S. K., Arora, A., Babu, S., Batra, Y., Chawla, Y. K., Chowdhury, A., Chaoudhuri, A., Eapen, E. C., Devarbhavi, H., Dhiman, R. K., Datta Gupta, S., Duseja, A., Jothimani, D., Kapoor, D., Kar, P., Khuroo, M. S., Kumar, A., Madan, K., Mallik, B., Maiwall, R., Mohan, N., Nagral, A., Nath, P., Panigrahi, S. C., Pawar, A., Philips, C. A., Prahraj, D., Puri, P., Rastogi, A., Saraswat, V. A., Saigal, S., Shalimar, Shukla, A., Singh, S. P., Verghese, T., Wadhawan, M. and The, Inasl Task-Force on Acute Liver Failure Indian National Association for the Study of Liver Consensus Statement on Acute Liver Failure (Part-2): Management of Acute Liver Failure Journal of Clinical and Experimental Hepatology; 2020, Address: Department of Gastroenterology, Kaliga Institute of Medical Sciences, Bhubaneswar, 751024, India Department of Gastroenterology, Sarvodaya Hospital and Research Centre, Faridababd, Haryana, India Department of Gastroenterology and Hepatology, KIIT University, Patia,</p>	INT	JAN TO JUN	Hepatology	SCOPUS H-INDEX:29 IF: 0.130 RG (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Bhubaneswar, Odisha 751 024, India Institute of Liver Gastroenterology & Pancreatico Biliary Sciences, Sir Ganga Ram Hospital, Rajinder Nagar, New Delhi, 110 060, India Department of Gastroenterology, Krishna Institute of Medical Sciences, Hyderabad, 500003, India Department of Gastroenterology, Indraprastha Apollo Hospital, SaritaVihar, New Delhi, 110 076, India Department of Gastroenterology, Kalinga Institute of Medical Sciences (KIMS), Kushabhadra Campus (KIIT Campus-5), Patia, Bhubaneswar, Odisha 751 024, India Department of Hepatology, School of Digestive and Liver Diseases, Institute of Post Graduate Medical Education & Research, Kolkata, 700020, India Hepatology and Liver Transplant, Institute of Liver & Biliary Sciences, D-1 Vasant Kunj, New Delhi, India Department of Hepatology, Christian Medical College, Vellore, India Department of Gastroenterology and Hepatology, St. John's Medical College Hospital, Bangalore, 560034, India Department of Hepatology, Postgraduate Institute of Medical Education and Research, Chandigarh, 160 012, India Department of Pathology, All India Institute of Medical Sciences, Ansari Nagar, New Delhi, 110 029, India Institute of Liver Disease and Transplantation, Dr Rela Institute and Medical Centre, Chrompet, Chennai, 600044, India Gleneagles Global Hospitals, Hyderabad, Telangana, India Department of Gastroenterology and Hepatology, Max Super Speciality Hospital, Vaishali, Ghaziabad, Uttar Pradesh 201 012, India Department of Gastroenterology, Dr Khuroo' s Medical Clinic, Srinagar, Kashmir, India Gastroenterology and Hepatology, Max Smart Super Specialty Hospital, Saket, New Delhi, India Department of Gastroenterology, Kalinga Institute of Medical Sciences, Bhubaneswar, 751024, India Hepatology Incharge Liver Intensive Care, Institute of Liver & Biliary Sciences, D-1 Vasant Kunj, New Delhi, India Department of Pediatric Gastroenterology, Hepatology & Liver Transplantation, Medanta – the MedicityHospital, Sector – 38, Gurgaon, Haryana, India Department of Gastroenterology, Apollo and Jaslok Hospital & Research Centre, 15, Dr Deshmukh Marg, Pedder Road, Mumbai, Maharashtra 400 026, India Liver & Digestive Diseases Institute, Fortis Escorts Hospital, Okhla Road, New Delhi, 110 025, India The Liver Unit and Monarch Liver Lab, Cochin Gastroenterology Group, Ernakulam Medical Centre, Kochi, Kerala 682028, India Department of Hepatology and Gastroenterology, Fortis Escorts Liver & Digestive Diseases Institute (FELDI), Fortis Escorts Hospital, Delhi, India Department of Liver Transplantation, Medanta – the MedicityHospital, Sector – 38,</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Gurgaon, Haryana, India Department of Gastroenterology, Sanjay Gandhi Post Graduate Institute of Medical Sciences, Raibareli Road, Lucknow, Uttar Pradesh 226 014, India Department of Hepatology, Department of Liver Transplantation, India Department of Gastroenterology and Human Nutrition Unit, All India Institute of Medical Sciences, New Delhi 29, India Department of Gastroenterology, LTM Medical College & Sion Hospital, India Department of Gastroenterology, SCB Medical College, Dock Road, Manglabag, Cuttack, Odisha 753 007, India Department of Gastroenterology, Government Medical College, Kozikhode, India Institute of Liver & Digestive Diseases and Head of Hepatology & Liver Transplant (Medicine), BLK Super Speciality Hospital, Delhi, India</p> <p>Acute liver failure (ALF) is not an uncommon complication of a common disease such as acute hepatitis. Viral hepatitis followed by antituberculosis drug-induced hepatotoxicity are the commonest causes of ALF in India. Clinically, such patients present with appearance of jaundice, encephalopathy, and coagulopathy. Hepatic encephalopathy (HE) and cerebral edema are central and most important clinical event in the course of ALF, followed by superadded infections, and determine the outcome in these patients. The pathogenesis of encephalopathy and cerebral edema in ALF is unique and multifactorial. Ammonia plays a crucial role in the pathogenesis, and several therapies aim to correct this abnormality. The role of newer ammonia-lowering agents is still evolving. These patients are best managed at a tertiary care hospital with facility for liver transplantation (LT). Aggressive intensive medical management has been documented to salvage a substantial proportion of patients. In those with poor prognostic factors, LT is the only effective therapy that has been shown to improve survival. However, recognizing suitable patients with poor prognosis has remained a challenge. Close monitoring, early identification and treatment of complications, and counseling for transplant form the first-line approach to manage such patients. Recent research shows that use of dynamic prognostic models is better for selecting patients undergoing liver transplantation and timely transplant can save life of patients with ALF with poor prognostic factors. © 2020</p>				
31.	<p>Angelin, C. S., Sugi, S. and Rajendran, K. Occupational Performance Coaching for Mothers of Children with Disabilities in India Canadian Journal of Occupational Therapy-Revue Canadienne D Ergotherapie;</p> <p>Address: [Angelin, C. Suja] Christian Med Coll & Hosp, Dept Neonatol & Occupat Therapy, Vellore, Tamil Nadu, India. [Sugi, S.] Kovai Med Ctr Res & Educ Trust, KMCH Coll Occupat Therapy, SF 259-5,259-6 & 256-1, Coimbatore, Tamil Nadu, India. [Rajendran, K.] KMCH Inst Hlth Sci & Res, Dept Pediat & Neonatol, 99 Avanashi Rd, Coimbatore, Tamil Nadu, India.</p>	INT	JUL TO DEC	Neonatology, Occupational Therapy	WOS:000609220100001

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	<p>Angelin, CS (corresponding author), Christian Med Coll & Hosp Vellore, IDA Scudder Rd, Vellore, Tamil Nadu, India. sujaangelin@gmail.com</p> <p>Background. Occupational Performance Coaching (OPC) aims to help mothers plan and manage theirs and their children's occupational performance. Purpose. To assess the effectiveness of OPC in improving occupational performance and parenting competence of mothers of children with disabilities in an Indian context. Methods. Mixed method design was used. Thirty-six mothers were assigned to intervention or control groups. Occupational performance and parenting competence were measured at three time points. Semi-structured interviews were used. Findings. OPC had significant effects on children's occupational performance ($p < 0.001$), mothers' occupational performance ($p < 0.001$), and self-competence ($p = 0.003$). There was also a significant difference between control and intervention groups in occupational performance ($p = 0.001$) and satisfaction ($p = 0.003$). Interviews revealed three themes: acceptance, self-learning, and challenges during OPC. Implications. OPC is effective in improving the occupational performance and parenting competence of mothers of children with disabilities in varied cultural contexts.</p>				
32.	<p>Anoop, S., Jebasingh, F. K., Rebekah, G., Kurian, M. E., Mohan, V. R., Finney, G. and Thomas, N.</p> <p>The triglyceride/glucose ratio is a reliable index of fasting insulin resistance: Observations from hyperinsulinaemic-euglycaemic clamp studies in young, normoglycaemic males from southern India Diabetes Metab Syndr; 2020, 14 (6): 1719-1723 Address: Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore, India. Department of Biostatistics, Christian Medical College, Vellore, India. Department of Community Health, Christian Medical College, Vellore, India. Department of Biochemistry, Christian Medical College, Vellore, India. Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore, India. Electronic Address: nihal_thomas@yahoo.com.</p> <p>BACKGROUND & AIMS: Non-obese Asians have a high propensity to develop insulin resistance. Therefore, screening such individuals for insulin resistance using simple surrogate indices is important. In this study, we aimed to validate the triglyceride-glucose (Tg/glu) ratio against the M value of hyperinsulinaemic-euglycaemic clamp (HEC) procedure and other surrogate indices of insulin resistance in normoglycaemic Indian males from Southern India. METHODS: A cohort of 105 normoglycaemic males (mean BMI: 19.2 ± 2.6 kg/m²) underwent HEC procedure. Surrogate indices of insulin resistance viz. the triglyceride-glucose (Tg/Glu) ratio, the triglyceride-glucose index, the McAuley's index, the HOMA-IR, the QUICKI, the fasting glucose to insulin ratio (FG-IR), and the fasting C-peptide index were calculated and correlated with the M value. The cut-off value for the Tg/Glu ratio was obtained using the Receiver Operator Characteristics (ROC) with</p>	INT	JUL TO DEC	Endocrinology, Diabetes and Metabolism, Biostatistics, Community Health, Biochemistry	PMID: 32916555

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	Area under curve (AUC) analysis at 95% confidence interval (CI). The P value < 0.05 was considered statistically significant. RESULTS: The Tg/Glu ratio demonstrated significantly higher AUC (0.81), when compared to the Tg × glu index (0.63), 20/fasting C peptide × fasting plasma glucose index (0.55), HOMA-IR (0.47), QUICKI (0.26), FGIR (0.12) and McAuley's index (0.18). For the Tg/Glu ratio, a cut-off value ≥ 1.19 had high sensitivity (80%) and specificity (79%) values (PPV: 16%; NPV: 98.8%) respectively. CONCLUSION: The Tg/Glu ratio can be used as a reliable surrogate index to screen for risk of insulin resistance in lean, normoglycaemic males from Southern India.				
33.	<p>Antiporta, D. A., Ambikapathi, R., Bose, A., Maciel, B., Mahopo, T. C., Patil, C., Turab, A., Olortegui, M. P., Islam, M., Bauck, A., McCormick, B. and Caulfield, L. E.</p> <p>Micronutrient intake and the probability of nutrient adequacy among children 9-24 months of age: results from the MAL-ED birth cohort study</p> <p>Public Health Nutr; 2020, 1-11</p> <p>Address: Department of Epidemiology, The Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA. Fogarty International Center, National Institutes of Health, Bethesda, MD, USA. Department of Community Health, Christian Medical College, Vellore, Tamil Nadu, India. Department of Nutrition, Universidade Federal do Rio Grande do Norte, Natal, Rio Negro, Brazil. Department of Nutrition, University of Venda, Thohoyandou, South Africa. Department of Women, Children and Family Health Sciences, University of Illinois-Chicago, Chicago, IL, USA. Centre of Excellence in Women and Child Health, Aga Khan University, Karachi, Pakistan. AB PRISMA, Iquitos, Loreto, Peru. icddr,b, Dhaka, Bangladesh. Department of International Health, The Johns Hopkins Bloomberg School of Public Health, Baltimore, MD21205, USA.</p> <p>OBJECTIVE: To estimate the total energy and micronutrient intakes of children 9-24 months of age and evaluate the probability of adequacy (PA) of the diet in seven MAL-ED sites. DESIGN: Cohort study. Food intake was registered monthly using 24-h recalls beginning at 9 months. We estimated PA for thirteen nutrients and overall mean PA (MPA) by site and 3-month periods considering estimated breast milk intake. SETTING: Seven sites in Asia, Africa and Latin America. PARTICIPANTS: 1669 children followed from birth to 24 months of age. RESULTS: Median estimated %energy from breast milk ranged from 4 to 70 % at 9-12 months, and declined to 0-39 % at 21-24 months. Iron bioavailability was low for all sites, but many diets were of moderate bioavailability for zinc. PA was optimal for most nutrients in Brazil and South Africa, except for iron and vitamin E (both), calcium and zinc (South Africa). PA for zinc increased only for children consuming a diet with moderate bioavailability. MPA increased 12-24 months as the quantity of</p>	INT	JUL TO DEC	Community Health	PMID: 32611463

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	complementary foods increased; however, PA for vitamin A remained low in Bangladesh and Tanzania. PA for vitamins D and E and iron was low for most sites and age groups. CONCLUSIONS: MPA increased from 12 to 24 months as children consumed higher quantities of food, while nutrient density remained constant for most nutrients. Ways to increase the consumption of foods containing vitamins D, E and A, and calcium are needed, as are ways to increase the bioavailability of iron and zinc.				
34.	<p>Apte, S., Ross, C., Fouzia, N. A., Kannan, S., Joshi, A., Kehedekar, D., Vemula, A., Kavitha, M. L., Abraham, A., Mannucci, P. M. and Calazzani, G. Low dose prophylaxis is effective in reduction of annual bleed rates in children with severe haemophilia in India - a multi-centre study Haemophilia; 2020, 26 66-66</p> <p>Address: [Apte, Shashikant; Kannan, Subramaniam; Joshi, Aditi; Kehedekar, Dipti] Sahyadri Specialty Hosp, Pune, Maharashtra, India. [Ross, Cecil] St Johns Med Coll Hosp, Bengaluru, India. [Fouzia, N. A.; Kavitha, M. L.; Abraham, Aby] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Vemula, Alekya; Mannucci, Pier M.] St Johns Med Coll, Bengaluru, India. [Vemula, Alekya; Mannucci, Pier M.] Res Hosp Ca Granda Fdn, Milan, Italy. [Calazzani, Gabriele] Ist Super Sanita, Rome, Italy.</p>	INT	JAN TO JUN	Clinical Haematology	<p>WOS:000536674800112 H-INDEX:88 IF: 3.590 BIOXBIO (2018/2019)</p>
35.	<p>Arora, S., Abhilash, K. P. P., Mitra, S., Hazra, D., Gunasekharan, K. and Yesudass, P. Is cerebrospinal fluid lactate useful in differentiating scrub typhus meningitis from aseptic, bacterial and tuberculous meningitis? Trop Doct; 2020, 49475520975957</p> <p>Address: Assistant Professor, Department of General Medicine, CMC, Vellore, India. Professor and Head, Department of Emergency Medicine, CMC, Vellore, India. Assistant Professor, Department of Emergency Medicine, CMC, Vellore, India. FAEM Trainee, Department of Emergency Medicine, CMC, Vellore, India. Tutor, Department of Clinical Biochemistry, CMC, Vellore, India.</p> <p>Scrub typhus is one of the most common causes of meningo-encephalitis in endemic areas of the Indian subcontinent. Numerous studies have established the reliability of cerebrospinal fluid lactate for differentiation of bacterial meningitis from aseptic meningitis. However, there are no reported data on the predictive value of cerebrospinal fluid lactate in scrub typhus meningitis. We thus conducted a cross-sectional study to examine the diagnostic accuracy of cerebrospinal fluid lactate in the differentiation of different causes of acute meningitis. Over two years, we studied 119 patients, with almost equal gender distribution, whose mean age was 43.58 (± 18) years and their overall mean duration of fever was 11.7 (± 21.0) days. Commonest clinical features overall were neck stiffness; values of cerebrospinal fluid lactate were lowest in aseptic meningitis, followed by scrub typhus, TB and bacterial meningitis. We conclude that cerebrospinal fluid lactate levels may be a useful adjunct to clinical features and laboratory investigations to differentiate between bacterial, viral, tubercular and scrub meningitis.</p>	INT	JUL TO DEC	General Medicine, Emergency Medicine, Clinical Biochemistry	<p>PMID: 33259753</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
36.	<p>Arthur, A., Rajasekaran, N. M. and Kuriakose, T. A reappraisal of indirect choroidal rupture using swept-source optical coherence tomography in-vivo pathology images in patients with blunt eye trauma Indian J Ophthalmol; 2020, 68 (10): 2131-2135 Address: Department of Eye, Christian Medical College, Vellore, Tamil Nadu, India. Department of Ophthalmology, The Queen Elizabeth Hospital, Adelaide, Australia. PURPOSE: To describe the in-vivo pathology of indirect choroidal rupture (ICR) in patients with recent ocular trauma using swept-source optical coherence tomography (SSOCT). METHODS: Retrospective observational study of the presenting and follow-up OCT images of four consecutive Asian patients with blunt trauma presenting over a period of 6 months and review of OCT descriptions in the literature. RESULTS: The three patients who presented within 2 weeks of injury showed a gap in the Bruch's membrane (BM)/retinal pigment epithelial complex at the site of the ICR. The distance of the gap ranged from 103 to 465 µm. Blood from associated tear in the choriocapillary layer dissected under the photoreceptor layer to lift it off the retinal pigment epithelium (RPE) layer. The Sattler's and Haller's layers of the choroid were not affected. Fibro-vascular proliferation occurring in the reparative phase bridges the gap in the BM, RPE complex. Late fibrous tissue proliferation extends into the Sattler's layer in the choroid and goes up to the outer nuclear layer in the retina disrupting its architecture. CONCLUSION: SSOCT is a useful tool to study the pathology of recent onset ICR as it is capable of imaging through blood. The primary injury in ICR seems to be a break in the Bruch's membrane. The RPE layer and choriocapillaries get disrupted secondary to the break in the BM as their basement membranes are part of the BM. Scarring during the reparative phase disrupts the adjacent layers of the choroid and retina.</p>	NAT	JUL TO DEC	Ophthalmology	PMID: 32971624 PMC:7728025
37.	<p>Arthur, A., Sivadasan, A., Mannam, P., Prabakhar, A. T., Aaron, S., Mathew, V., Karthik, M., Benjamin, R. N., Iqbalahmed, S. A., Rynjah, G. L. and Alexander, M. Tolosa-Hunt Syndrome: Long-Term Outcome and Role of Steroid-Sparing Agents Ann Indian Acad Neurol; 2020, 23 (2): 201-205 Address: Department of Ophthalmology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Department of Neurological Sciences, Neurology Unit, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Department of Radiology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. BACKGROUND: Tolosa-Hunt Syndrome (THS) is one of the causes of cavernous sinus syndrome causing painful ophthalmoplegia. Literature on long-term outcome of this rare condition is scarce. AIMS AND OBJECTIVES: The aim is to study the recurrence and role of steroid-sparing agents in THS. METHODOLOGY: All cases of THS treated at a tertiary-level teaching hospital during a 10-year period were</p>	NAT	JAN TO JUN	Ophthalmology, Neurological Sciences, Radiology	PMID:32189862 PMC ID: PMC7061504 WOS:000518682100013 SCOPUS H-INDEX:27 IF: 0.898 BIOXBIO (2018/2019)

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	studied. Clinical and radiological profile, response to treatment and recurrences were noted. RESULTS: A total of 44 cases were studied. The mean age was 49.5 years, Males constituted 23/44 (52%). The first symptom was pain in 90%. Ptosis with ophthalmoplegia was the most common deficit 29/44 (66%). Lesions confined to cavernous sinus 27/44 (61%) was the most frequent magnetic resonance imaging finding. All patients received steroids as the initial treatment and 15/44 (34%) received steroid-sparing agents. Follow-up ranged from 6 to 120 months (Mean 39 months). Two patients had alternative diagnosis of leptomeningeal malignancy and hypertrophic pachymeningitis on follow-up. Recurrences occurred in 18/37 (48.6%). Time for recurrence varied from 8 months to 7 years. (Mean 18 months). No clinical or radiological predictors for recurrence were identified. Patients who received steroid-sparing agents had a significantly lower recurrence 3/15 (20%) versus 14/26 (53.8%)P < 0.034. CONCLUSIONS: Around 50% of patients with THS can have recurrence. Steroid-sparing agents appear to prevent recurrence. A prospective multicenter randomized controlled trial may help to evaluate the risk and benefits of steroid-sparing therapy and to identify any possible predictors for recurrence.				
38.	<p>Aruldas, K., Means, A. R., Titus, A., Jacob, Y., Rajendiran, R., Johnson, J., Emmanuel-Fabula, M., Kaliappan, S. P., Juvekar, S. K., Kang, G., Walson, J. L. and Ajjampur, S. S. R.</p> <p>Gender differences in the perceived need for community-wide deworming: Formative qualitative research from the DeWorm3 study, India PLoS Negl Trop Dis; 2020, 14 (11): e0008829</p> <p>Address: [Aruldas, Kumudha; Titus, Angelin; Jacob, Yesudoss; Rajendiran, Rajeshkumar; Johnson, Jabaselvi; Kaliappan, Saravanakumar Puthupalayam; Kang, Gagandeep; Ajjampur, Sitara Swarna Rao] Christian Med Coll & Hosp, Div Gastrointestinal Sci, Wellcome Trust Res Lab, Vellore, Tamil Nadu, India. [Means, Arianna Rubin; Emmanuel-Fabula, Mira] Univ Washington, Dept Global Hlth, Seattle, WA 98195 USA. [Juvekar, Sanjay Kamlakar] KEM Hosp Res Ctr, Vadu Rural Hlth Program, Pune, Maharashtra, India. [Walson, Judd L.] Univ Washington, Dept Global Hlth Med Pediat & Epidemiol, Seattle, WA 98195 USA. [Walson, Judd L.] Nat Hist Museum, DeWorm3, Div Life Sci, London, England. Ajjampur, SSR (corresponding author), Christian Med Coll & Hosp, Div Gastrointestinal Sci, Wellcome Trust Res Lab, Vellore, Tamil Nadu, India. sitararao@cmcvellore.ac.in</p> <p>Current soil-transmitted helminth (STH) programs target morbidity control with school-based deworming. Increasing interest in steering neglected tropical disease (NTD) programmes from morbidity control towards disease elimination has prompted evaluation of strategies that may interrupt transmission. The feasibility of interrupting transmission of STH with community-wide deworming is being tested in the ongoing DeWorm3 cluster randomized trial. Gender-based</p>	INT	JUL TO DEC	Gastrointestinal Science, Wellcome Trust Research Lab	<p>PMID:33237928 PMC ID:7688162 WOS:000595726300002 SCOPUS</p>

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	<p>perspectives about susceptibility to infection and need for treatment have been shown to influence both health-seeking behaviour and health outcomes. We carried out a qualitative study among men and women in the community to understand their knowledge, beliefs, and attitudes about STH infections and community-wide mass drug administration (cMDA). Eight semi-structured focus group discussions were conducted among men and women residing in the DeWorm3 study site in India-Vellore and Tiruvannamalai districts of Tamil Nadu. Thematic coding was used to analyse the transcripts in ATLAS.ti 8.0. Both men and women in this study demonstrated a high level of STH knowledge but some men had misconceptions that intestinal worms were beneficial. Men and women shared several similar beliefs and attitudes regarding STH treatment. Both believed that adults were likely to have STH infections and both reported that stigma prevented them from seeking treatment. Influenced by gender norms, women were more likely to associate STH infections with inadequate sanitation and hygiene, while men were more likely to believe that those engaged in agricultural work were at risk. Both genders reported a positive attitude towards cMDA for STH. Barriers to cMDA implementation differed by gender; women expressed concern regarding side-effects and drug quality while men were concerned that treatment coverage may be affected due to the absence of people during the day when the drug is distributed. Both men and women perceived the treatment of adults for STH infections to be important, however, the perceived barriers to participating in cMDA differed by gender in this community. The study identified key messages to be incorporated in communication and outreach strategies for cMDA programmes.</p> <p>Author summary In this qualitative study, we conducted focus group discussions with men and women residing in communities participating in a cluster-randomized trial of community-wide deworming for soil-transmitted helminth (STH) in order to understand how knowledge, beliefs, and attitudes are influenced by gender. Men and women shared similar beliefs and attitudes, although there were differences in knowledge about STH infection and its treatment. While both genders understood that STH transmission is associated with poor sanitation and hygiene, women voiced a greater appreciation of these risk factors, perhaps because of the STH knowledge gained from the frontline health workers during school MDA and anaemia programs. Men and women both believed that adults may be re-infecting children in the community and both articulated acceptance of deworming medications. However, both men and women also noted that stigma associated with an adult having STH infection prevented them from actively seeking treatment. The cMDA for STH, may provide important socio-behavioural benefits to communities, as it provides an opportunity to treat all community members over one year of age without discrimination by infection status or age. However, compliance with treatment may be affected by community beliefs; women expressed concerns regarding treatment safety while men specifically expressed concerns about achieving treatment coverage due to the absence of some individuals during cMDA due to migration and people being absent for work. Findings from this study suggest that communication and dissemination messages</p>				

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	should include a rationale for cMDA and stress the safety and benefits of the drug. In addition, these results highlight the importance of carefully timing the delivery of cMDA to ensure that working adults and migratory populations have access.				
39.	<p>Arunachalam, A. K., Janet, N. B., Korula, A., Lakshmi, K. M., Kulkarni, U. P., Aboobacker, F. N., Abraham, A., George, B., Balasubramanian, P. and Mathews, V. Prognostic value of MRD monitoring based on BCR-ABL1 copy numbers in Philadelphia chromosome positive acute lymphoblastic leukemia Leuk Lymphoma; 2020, 61 (14): 3468-3475</p> <p>Address: Department of Hematology, Christian Medical College, Vellore, India. Assessment of measurable residual disease (MRD) has emerged as a powerful prognostic tool in pediatric and adult acute lymphoblastic leukemia (ALL). In this single-centre retrospective study, we evaluated the prognostic relevance of MRD based on BCR-ABL1 copy numbers in Ph + ALL patients between 2006 and 2018. Molecular responses were evaluated at 3, 6, 9 and 12 months after the initiation of treatment. Patients who had their MRD assessed at three or more time points were categorized into MRD good risk or poor risk based on BCR-ABL1/ABL1 copy number ratio. MRD positive patients consistently showed a trend toward poor survival and on multivariate analysis, MRD poor risk patients had adverse outcomes when compared to MRD good risk patients in terms of overall (OS; p = .031) and event-free (EFS; p < .001) survival. In conclusion, molecular MRD based on BCR-ABL1 copy number ratio is an ideal prognostic indicator in Ph + ALL patients undergoing treatment.</p>	INT	JUL TO DEC	Hematology	PMID: 32852239
40.	<p>Arunachalam, A. K., Maddali, M., Aboobacker, F. N., Korula, A., George, B., Mathews, V. and Edison, E. S. Primary Immunodeficiencies in India: Molecular Diagnosis and the Role of Next-Generation Sequencing J Clin Immunol; 2020, Address: Department of Hematology, Christian Medical College, Vellore, Tamil Nadu, 632004, India. Department of Hematology, Christian Medical College, Vellore, Tamil Nadu, 632004, India. eunice@cmcvellore.ac.in.</p> <p>Primary immunodeficiency diseases (PIDs) are a group of clinically and genetically heterogeneous disorders showing ethnic and geographic diversities. Next-generation sequencing (NGS) is a comprehensive tool to diagnose PID. Although PID is common in India, data on the genetic spectrum of PIDs are limited due to financial restrictions. The study aims to characterize the clinical and genetic spectrum of PID patients in India and highlight the importance of a cost-effective targeted gene panel sequencing approach for PID in a resource-limited setting. The study includes 229 patients with clinical and laboratory features suggestive of PIDs. Mutation analysis was done by Sanger sequencing and NGS targeting a customized panel of genes. Pathogenic variants were identified in 97 patients involving 42 different genes with BTK and IL12RB1 being the most common mutated genes. Autosomal recessive and X-linked recessive inheritance were seen in 51.6% and 23.7% of patients. Mendelian susceptibility to mycobacterial diseases</p>	INT	JUL TO DEC	Hematology	PMID: 33225392

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	(MSMD) and IL12RB1 mutations was more common in our population compared to the Western world and the Middle East. Two patients with hypomorphic RAG1 mutations and one female with skewed CYBB mutation were also identified. Another 40 patients had variants classified as variants of uncertain significance (VUS). The study shows that targeted NGS is an effective diagnostic strategy for PIDs in countries with limited diagnostic resources. Molecular diagnosis of PID helps in genetic counseling and to make therapeutic decisions including the need for a stem cell transplantation.				
41.	<p>Arunachalam, A. K., Sumithra, S., Maddali, M., Fouzia, N. A., Abraham, A., George, B. and Edison, E. S. Molecular Characterization of G6PD Deficiency: Report of Three Novel G6PD Variants Indian J Hematol Blood Transfus; 2020, 36 (2): 349-355</p> <p>Address: 1Department of Haematology, Christian Medical College, OT Building, 4th Floor, Vellore, Tamil Nadu 632004 India. GRID: grid.11586.3b. ISNI: 0000 0004 1767 8969 2Department of Hematology, Christian Medical College, OT Building, 1st Floor, Vellore, Tamil Nadu 632004 India. GRID: grid.11586.3b. ISNI: 0000 0004 1767 8969</p> <p>G6PD deficiency is a monogenic, X-linked genetic defect with a worldwide prevalence of around 400 million people and an overall prevalence of 8.5% in India. Hemolytic anemia is encountered in only a small proportion of patients with G6PD variants and is usually triggered by some exogenous agent. Although G6PD deficiency was reported in India more than 50 years ago, there are very few studies on molecular characterization and phenotypic correlation in G6PD deficient patients. We aimed to study the epidemiology and correlate the phenotypic expression with molecular genotypes in symptomatic G6PD deficient patients. All symptomatic hemolytic anaemia patients with a possible etiology of G6PD deficiency based on the clinical, hematological and biochemical parameters and reduced G6PD enzyme levels were included in this study. Molecular analysis of the G6PD gene was done by direct Sanger sequencing. From a total of 38 patients with hemolytic anemia suspected for G6PD deficiency, 24 patients had reduced G6PD enzyme levels and were included for the molecular analysis and mutations in the G6PD gene were identified in 21 of them (83.3%). The different mutations identified in our study include 6 patients with c.131C > G (G6PD Orissa), 3 patients with c.563C > T (G6PD Mediterranean), two patients with c.825G > T (G6PD Bangkok), one patient each with c.208T > C (G6PD Namouru), c.487G > A (G6PD Mahidol), c.949G > A (G6PD Kerala-Kalyan), c.100 G > A (G6PD Chatham), c.1178C > G (G6PD Nashville), c.1361 G > A (G6PD Andalus) and 4 patients with novel mutations (2 patients with c.1186C > T and 1 patient each with c.1288-2A > T and c.1372C > T. No disease causing genetic variants were identified in the other</p>	NAT	JAN TO JUN	Clinical Haematology	PMID:32425388 PMC ID: PMC7229042 SCOPUS H-INDEX:15 IF: 0.869 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	three cases. Co-inheritance of other red cell and hemoglobin disorders can modify the clinical phenotype of G6PD patients and the diagnostic accuracy can be improved by molecular characterization of the variant.				
42.	<p>Arunachalam, A. K., Suresh, H., Edison, E. S., Korula, A., Aboobacker, F. N., George, B., Shaji, R. V., Mathews, V. and Balasubramanian, P. Screening of genetic variants in ELANE mutation negative congenital neutropenia by next generation sequencing Journal of Clinical Pathology; 2020, 73 (6): 322-327</p> <p>Address: [Arunachalam, Arun Kumar; Suresh, Hemamalini; Edison, Eunice Sindhuvi; Korula, Anu; Aboobacker, Fouzia N.; George, Bijju; Shaji, Ramachandran, V; Mathews, Vikram; Balasubramanian, Poonkuzhali] Christian Med Coll & Hosp, Clin Haematol, Vellore 632004, Tamil Nadu, India. Balasubramanian, P (reprint author), Christian Med Coll & Hosp, Clin Haematol, Vellore 632004, Tamil Nadu, India. bpoonkuzhali@cmcvellore.ac.in</p> <p>Aims Congenital neutropenia (CN) is a rare inherited disease that results in recurrent, life-threatening bacterial infections due to a deficiency of mature neutrophils. They are usually caused by heterozygous ELANE mutations although mutations in other genes like HAX-1, G6PC3 and GF11 have also been reported. Identifying the causative mutation aids in the establishment of diagnosis and rules out other secondary causes of neutropenia like autoimmune cytopenia and evolving aplasia. We aimed to identify the molecular defects in CN patients who had no mutations in ELANE gene, by next generation sequencing (NGS) targeting a customised panel of genes. Methods DNA samples were sequenced with an Illumina NextSeq sequencer using an in-house customised panel of genes at >= 100x depth. Bioinformatics analysis was carried out and the pathogenic variants were identified using a stepwise filtering and analysis strategy. Specific mutations identified were subsequently validated by Sanger sequencing. Results The pathogenic variants identified in the study includes previously reported variants in SBDS (compound heterozygous c.258+2T>C and c.1A>T), GATA2 (heterozygous c.1186C>T) and novel variants in WAS (hemizygous c.812T>C), JAGN1 (homozygous c.70G>A) and RTEL1 (heterozygous c.2893G>C) genes. Conclusion This study highlights that the absence of ELANE mutations does not rule out the diagnosis of CN and this NGS based approach with a customised panel will help in diagnostic confirmation in such patients. The early onset of the disease, clinical severity and associated high risk of malignant transformation in CN strongly suggests the need for early diagnosis and therapeutic intervention.</p>	INT	JAN TO JUN	Clinical Haematology	<p>PMID: 31732620 WOS:000538123000005 SCOPUS H-INDEX:121 IF: 2.346 BIOXBIO (2018/2019)</p>
43.	<p>Ashley, E. A., Mclean, A., Chiara, F., Feasey, N., Jaoko, W., Opintan, J. A., Peacock, S. J., Rupali, P. and Turner, P. Setting priorities for patient-centered surveillance of drug-resistant infections Int J Infect Dis; 2020, 97 60-65</p>	INT	JAN TO JUN	Infectious Diseases	<p>PMID:32502663 H-INDEX:79 IF: 3.538 BIOXBIO (2018/2019)</p>

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	<p>Address: Lao-Oxford-Mahosot Hospital-Wellcome Trust Research Unit, Microbiology Laboratory, Mahosot Hospital, Vientiane, Lao PDR; Myanmar Oxford Clinical Research Unit, Yangon, Myanmar; Centre for Tropical Medicine and Global Health, Nuffield Department of Medicine, University of Oxford, Oxford, UK. Electronic Address: liz@tropmedres.ac.</p> <p>Myanmar Oxford Clinical Research Unit, Yangon, Myanmar; Centre for Tropical Medicine and Global Health, Nuffield Department of Medicine, University of Oxford, Oxford, UK; Infectious Diseases Data Observatory (IDDO), Centre for Tropical Medicine and Global Health, University of Oxford, UK.</p> <p>Drug-Resistant Infections Priority Programme, Wellcome, London, UK.</p> <p>Malawi-Liverpool-Wellcome Trust Clinical Research Programme, Blantyre, Malawi; Department of Clinical Sciences, Liverpool School of Tropical Medicine, Liverpool, UK.</p> <p>Department of Medical Microbiology, University of Nairobi, Kenya.</p> <p>Department of Medical Microbiology, University of Ghana, Accra, Ghana.</p> <p>Department of Medicine, University of Cambridge, UK.</p> <p>Department of Infectious Diseases, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Centre for Tropical Medicine and Global Health, Nuffield Department of Medicine, University of Oxford, Oxford, UK; Cambodia Oxford Medical Research Unit, Angkor Hospital for Children, Siem Reap, Cambodia.</p> <p>METHODS: A priority-setting process (PSP) was launched to define priorities for patient-centered antimicrobial resistance (AMR) surveillance and research in low- and middle-income countries (LMICs). A list of uncertainties related to AMR surveillance in human health was generated using an online survey of stakeholders in LMICs, which asked for unanswered questions about diagnosis, treatment, or prevention of antibiotic resistance. RESULTS: A total of 445 respondents generated 1076 questions that were mapped to a final shortlist of 107 questions. The most common theme was the treatment of drug-resistant infections, followed by diagnosis, then prevention, and requests for local AMR data. The most asked question was a request for local AMR data, revealing the lack of basic information in many LMICs to guide actions to tackle AMR. The steering group recommended three research areas to be prioritized for funding in the next five years: infection prevention and control in LMICs, improved electronic patient records, starting with laboratory information management systems, and sustainable behavior change among doctors and other health care professionals with a focus on diagnostic stewardship.</p>				
44.	<p>Ashok, A., James, D., Gahukamble, A., Palocaren, T. and Madhuri, V. Modified Woodward's procedure confers functional improvement in Sprengel's deformity J Pediatr Orthop B; 2020, Address: Department of Paediatric Orthopaedics,</p>	INT	JUL TO DEC	Paediatric Orthopaedics	PMID: 33136795

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Christian Medical College, Vellore, Tamil Nadu, India. Modified Woodward's procedure improves shoulder movement and cosmesis. There is a paucity of literature reporting objective assessment of functional outcomes. We report cosmetic and functional outcomes in Sprengel's deformity treated with modified Woodward's procedure. Children aged 12 years and under, who underwent Modified Woodward's procedure from January 2006 to December 2014 were included in the prospective study. Improvement in Cavendish grade, Rigault scale, and shoulder movements was noted. Pediatric outcomes data collection instrument (PODCI) and simple shoulder test (SST) scores were assigned at the final follow-up. Statistical analysis was conducted with paired T-test and Wilcoxon signed-rank tests. Fourteen patients (one bilateral) with a mean follow-up of 4.5 years (1-8 years) were analyzed. The mean age at surgery was 5.7 years (3-12 years). Ten (71%) patients had omovertebral bars. Six patients had Klippel-Feil syndrome including one with cervical hemivertebrae with anterior chest wall deficiency. Cavendish grade and Rigault scale improved significantly ($P < 0.05$). Mean shoulder abduction and forward flexion improved by 37.3° ($P < 0.001$) and 38.7° ($P < 0.001$), respectively. The mean normative PODCI score was 24.07 (reported normative score ranges from -146 to 53) and the SST score was 9.64 (reported score ranges from 0 to 12). SST scores demonstrated a moderate correlation with shoulder function. Patients without associated anomalies had better cosmetic ($P = 0.057$) and functional ($P = 0.029$) improvement. Modified Woodward's procedure improved cosmesis and provided near-normal functional outcomes in children irrespective of age and sex. Better improvement was noted in children without anomalies.</p>				
45.	<p>Asirvatham, E. S., Lakshmanan, J., Sarman, C. J. and Joy, M. Demystifying the varying case fatality rates (CFR) of COVID-19 in India: Lessons learned and future directions J Infect Dev Ctries; 2020, 14 (10): 1128-1135 Address: Health Systems Research India Initiative (HSRII), Trivandrum, India. aedwinsam@yahoo.com. Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India. ljey@hotmail.com. Independent Public Health Consultant, New Delhi, India. charishma.jones@gmail.com. Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India. melvinmj94@gmail.com. INTRODUCTION: At the end of the second week of June 2020, the SARS-CoV-2 responsible for COVID-19 infected above 7.5 million people and killed over 400,000 worldwide. Estimation of case fatality rate (CFR) and determining the associated factors are critical for developing targeted interventions. METHODOLOGY: The state-level adjusted case fatality rate (aCFR) was estimated by dividing the cumulative number of deaths on a given day by the cumulative number confirmed cases 8 days before, which is the average time-lag between diagnosis and death. We</p>	INT	JUL TO DEC	Biostatistics	PMID: 33175707

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	<p>conducted fractional regression analysis to determine the predictors of aCFR. RESULTS: As of 13 June 2020, India reported 225 COVID-19 cases per million population (95% CI:224-226); 6.48 deaths per million population (95% CI:6.34-6.61) and an aCFR of 3.88% (95% CI:3.81-3.97) with wide variation between states. High proportion of urban population and population above 60 years were significantly associated with increased aCFR (p=0.08, p=0.05), whereas, high literacy rate and high proportion of women were associated with reduced aCFR (p<0.001, p=0.03). The higher number of cases per million population (p=0.001), prevalence of diabetes and hypertension (p=0.012), cardiovascular diseases (p=0.05), and any cancer (p<0.001) were significantly associated with increased aCFR. The performance of state health systems and proportion of public health expenditure were not associated with aCFR. CONCLUSIONS: Socio-demographic factors and burden of non-communicable diseases (NCDs) were found to be the predictors of aCFR. Focused strategies that would ensure early identification, testing and effective targeting of non-literate, elderly, urban population and people with comorbidities are critical to control the pandemic and fatalities.</p>				
46.	<p>Atri, A., Jiwanmall, S. A., Nandyal, M. B., Kattula, D., Paravathareddy, S., Paul, T. V., Thomas, N. and Kapoor, N. The Prevalence and Predictors of Non-alcoholic Fatty Liver Disease in Morbidly Obese Women - A Cross-sectional Study from Southern India Eur Endocrinol; 2020, 16 (2): 152-155 Address: Department of Endocrinology, Diabetes and Metabolism, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Department of Psychiatry, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Noncommunicable Disease Unit, Melbourne School of Population and Global Health, University of Melbourne, Victoria, Australia. BACKGROUND: The prevalence of obesity is increasing rapidly in India and so are its associated comorbidities. Non-alcoholic fatty liver disease (NAFLD), the hepatic manifestation of metabolic syndrome, is commonly associated with obesity. However, limited data are available on its prevalence and clinical indicators among morbidly obese Indian women. The aim of our study was to find the prevalence of NAFLD in morbidly obese Indian women and study the clinically measurable obesity indicators that would best predict NAFLD. METHODS: This was a cross-sectional study, conducted in the Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore. Women were enrolled who were diagnosed to have NAFLD on sonography. Anthropometric variables, such as body mass index, waist circumference, hip circumference, waist-hip ratio and waist-height ratio were measured and compared between the two groups. SPSS Statistics 21.0 software was used for analysing the data. RESULTS: One hundred and six consecutive, morbidly obese women were recruited in this study. Nearly three-quarters (73.6%) of the 106 morbidly obese participants were found to have NAFLD. We found waist circumference, body mass index and waist-height ratio to</p>	INT	JUL TO DEC	Endocrinology, Diabetes and Metabolism, Psychiatry	PMID: 33117448 PMC:7572172

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	be most useful in distinguishing between patients with and without NAFLD, and found waist-height ratio was the best screening tool for diagnosing NAFLD. CONCLUSION: NAFLD is present in a large proportion of morbidly obese women. Waist-height ratio could be used a surrogate screening tool to detect NAFLD in resource-constrained settings.				
47.	<p>Atri, A., Kocherlakota, C. M. and Dasgupta, R. Managing diabetic foot in times of COVID-19: time to put the best 'foot' forward Int J Diabetes Dev Ctries; 2020, 1-8 Address: Christian Medical College & Hospital, Vellore, Tamil Nadu India. GRID: grid.11586.3b. ISNI: 0000 0004 1767 8969 Department of Diabetology, Dr. Mohan's Diabetes Specialities Centre, Chennai, Tamil Nadu India. GRID: grid.410867.c. ISNI: 0000 0004 1805 2183 Department of Endocrinology, NM Hospitals, Kolkata, West Bengal 700008 India.</p> <p>INTRODUCTION: The COVID-19 pandemic has had an unparalleled impact on the socio-economic and healthcare structure of India. Due to our large populations of diabetic patients, who have an increased risk of worse outcomes with COVID-19 infection, it is of utmost public health importance to analyse the relationship between the two. The aim of our review was to analyse the possible relationship between COVID-19 infection and DFUs, which are a fairly common, yet serious complication in diabetic patients, as well as their management, under the given changing circumstances. METHODOLOGY: An extensive review of related educational articles was analysed from various databases. RESULTS: The two main pathogenic mechanisms described in COVID-19 infection are a cytokine storm (causing ARDS) as well as an acquired coagulopathy, with widespread thrombosis. DFUs are associated with an underlying peripheral neuropathy, a chronic low-grade inflammatory state and peripheral arterial disease, which lead to chronic non-healing ulcers. Similarities seen in the pathogenic mechanisms of these two conditions make a bidirectional relationship highly plausible. CONCLUSION: Due to the disruptions in the healthcare system brought on by the COVID-19 pandemic, changes in practice to a telehealth-driven approach, with emphasis on homecare and community clinics, need to be adopted, to ensure best possible care to patients with DFUs, in order to reduce their risk of DFU-related complications and need for hospitalization.</p>	INT	JUL TO DEC	Endocrinology, Diabetes and Metabolism	<p>PMID: 32904959 PMC:7461755</p>
48.	<p>Author: Nampootheri, S., Yesodharan, D., Bhattacharjee, A., Ahamed, H., Puri, R. D., Gupta, N., Kabra, M., Ranganath, P., Bhat, M., Phadke, S., Radha Rama Devi, A., Jagadeesh, S., Danda, S., Sylaja, P. N., Mandal, K., Bijarnia-Mahay, S., Makkar, R., Verma, I. C., Dalal, A. and Ramaswami, U. Year: 2020 Title: Fabry disease in India: A multicenter study of the clinical and mutation spectrum in 54 patients Publisher: John Wiley and Sons Inc Volume: 56, Pages: 82-94, Type of Work: Article, Abbreviation: JIMD Reports JIMD Reports Volume 56, Issue 1, 1 November 2020, Pages 82-94</p>	INT	JUL TO DEC	Clinical Genetics	Scopus

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	<p>ISBN/ISSN: 21928304 (ISSN) DOI: 10.1002/jmd2.12156</p> <p>URL: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85095821444&doi=10.1002%2fjmd2.12156&partnerID=40&md5=c19def79a6ad3e2c1b967cd9f22265cd</p> <p>Author Address: Department of Pediatric Genetics, Amrita Institute of Medical Sciences and Research Centre, Cochin, Kerala, India Diagnostics Division, Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad, India Department of Cardiology, Amrita Institute of Medical Sciences and Research Centre, Cochin, Kerala, India Institute of Genetics and Genomics, Sir Ganga Ram Hospital, New Delhi, India Division of Genetics, Department of Pediatrics, All India Institute of Medical Sciences, New Delhi, India Department of Medical Genetics, Nizam's Institute of Medical Sciences, Hyderabad, India Department of Clinical Genetics, Centre for Human Genetics, Bangalore, India Department of Medical Genetics, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, India Rainbow Children Hospital, Hyderabad, India Department of Clinical Genetics and Genetic Counseling, Mediscan Systems, Chennai, India Department of Clinical Genetics, Christian Medical College and Hospital, Vellore, India Comprehensive Stroke Care Program, Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), Trivandrum, Kerala, India Sanofi Genzyme, New Delhi, India Lysosomal Disorders Unit, Institute of Immunity and Transplantation, Royal Free London NHS Foundation Trust, London, United Kingdom</p> <p>Name of Database: Scopus Language: English</p> <p>Abstract: Fabry disease (FD) is a treatable X linked lysosomal storage disorder with a wide phenotypic spectrum. There is a scarcity of published data on the burden of FD in India. This study evaluates the clinical and molecular spectrum of Indian patients with FD. In this multicentric study involving 10 tertiary referral centers in India, we analyzed the clinical course and genotype of 54 patients from 37 families. Family screening identified 19 new patients (35%) from 12 index cases. Then, 33 GLA gene variants were identified in 49/54 (90.7%) which included 11 novel and 22 known pathogenic variants. Of the 54 patients in our cohort, 40 patients had "classical" and 10 patients had a "nonclassical" presentation. The symptoms and signs included kidney dysfunction in 38/54 (70.3%), neuropathic pain in 34/54 (62.9%), left ventricular hypertrophy in 22/49 (44.8%) and stroke</p>				

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	<p>in 5/54 (9.2%). Female heterozygotes were 10/54 (18.5%) of whom 2 were index cases. There was a significant delay in reaching the diagnosis of 11.7 years. Enzyme replacement therapy was initiated in 28/54 (51.8%) patients with significant improvement of neuropathic pain and gastrointestinal symptoms. This study highlights the clinical presentation and mutational spectrum of FD in India and suggests that family screening and screening of high-risk groups (hypertrophic cardiomyopathy, idiopathic chronic renal failure and cryptogenic stroke) could be the most cost-effective strategies for early identification of FD. © 2020 The Authors. JIMD Reports published by John Wiley & Sons Ltd on behalf of SSIEM.</p> <p>Notes: Export Date: 22 February 2021 Correspondence Address: Nampoothiri, S.; Department of Pediatric Genetics, India; email: sheelanampoothiri@aims.amrita.edu Funding details: Sanofi Genzyme Funding text 1: Dr S. P. acknowledges funding support for molecular testing of 14 patients from Indian Council of Medical Research—Department of Health Research grant [GIA/ 31(vi)/2014-DHR]. The authors thank the Indian Medical Advisory Board (IMAB) members for contributing to this retrospective study. The authors acknowledge the diagnostic teams at laboratories mentioned in the paper for enzyme testing, mutation analysis and biomarker assays. The authors express their gratitude to manufacturers of ERT (Sanofi Genzyme) and Shire (Takeda) for supporting FD patients with compassionate access to ERT. The authors thank the patients and families for participating in this study. The authors acknowledge the financial support from Sanofi Genzyme India for covering the publication fee of this article.</p>				
49.	<p>Aydin, S. Z., Mathew, A. J., Koppikar, S., Eder, L. and Ostergaard, M. Imaging in the diagnosis and management of peripheral psoriatic arthritis Best Practice & Research in Clinical Rheumatology; 2020, 34 (6):</p> <p>Address: [Aydin, Sibel Zehra] Univ Ottawa, Rheumatol, Fac Med, Ottawa, ON, Canada. [Aydin, Sibel Zehra] Ottawa Hosp Res Inst, Ottawa, ON, Canada. [Mathew, Ashish J.; Ostergaard, Mikkel] Rigshosp, Copenhagen Ctr Arthrit Res COPECARE, Ctr Rheumatol & Spine Dis, Glostrup, Denmark. [Mathew, Ashish J.; Ostergaard, Mikkel] Univ Copenhagen, Fac Hlth & Med Sci, Dept Clin Med, Copenhagen, Denmark. [Mathew, Ashish J.] Christian Med Coll & Hosp, Dept Clin Immunol & Rheumatol, Vellore, Tamil Nadu, India. [Mathew, Ashish J.] Univ Toronto, Univ Hlth Network, Ctr Prognosis Studies Rheumat Dis, Krembil Res Inst, Toronto, ON, Canada. [Mathew, Ashish J.; Koppikar, Sahil; Eder, Lihi] Univ Toronto, Dept Med, Div Rheumatol, Toronto, ON, Canada. [Koppikar, Sahil; Eder, Lihi] Womens Coll Hosp, Womens Coll Res Inst, Toronto, ON, Canada. Aydin, SZ (corresponding author), Univ Ottawa, Dept Med, Div Rheumatol, 1967 Riverside Dr, Ottawa, ON K1H 7W9, Canada. saydin@toh.ca; mathewaj@cmcvellore.ac.in; Sahil.Koppikar@wchospital.ca; Lihi.EDER@wchospital.ca; mo@dadlnet.dk</p>	INT	JUL TO DEC	Clinical Immunology and Rheumatology	WOS:000600663100008

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Psoriatic arthritis is a heterogenous disease affecting peripheral and axial joints, tendons, ligaments, and their insertions, in addition to the skin and the nails. The complexity of the involved structures has puzzled clinicians trying to understand the underlying pathology that leads to symptoms in order to choose the appropriate medications with different modes of actions. Imaging, mainly ultrasound and magnetic resonance imaging, allows of accurate detection of inflammatory changes in the musculoskeletal structures, which helps to avoid false positive and negative assessments. The linking of different anatomical structures' involvement using imaging also provides insights into the pathogenesis of psoriatic arthritis. In this review, ultrasound and magnetic resonance imaging will be discussed in depth with regard to their use in the field of peripheral psoriatic arthritis, with a focus on the literature from the last 4 years and recent advances. (C) 2020 Elsevier Ltd. All rights reserved.</p>				
50.	<p>Aye, A. M. M., Bai, X. L., Borrow, R., Bory, S., Carlos, J., Caugant, D. A., Chiou, C. S., Dai, V. T. T., Dinleyici, E. C., Ghimire, P., Handryastuti, S., Heo, J. Y., Jennison, A., Kamiya, H., Sia, L. T., Lucidarme, J., Marshall, H., Putri, N. D., Saha, S., Shao, Z. J., Sim, J. H. C., Smith, V., Taha, M. K., Thanh, P. V., Thisyakorn, U., Tshering, K., Vazquez, J., Veeraraghavan, B., Yezli, S. and Zhu, B. Q.</p> <p>Meningococcal disease surveillance in the Asia-Pacific region (2020): The global meningococcal initiative Journal of Infection; 2020, 81 (5): 698-711</p> <p>Address: [Aye, Aye Mya Min] Yangon Childrens Hosp, Yangon, Myanmar. [Bai, Xilian; Borrow, Ray; Lucidarme, Jay] Manchester Royal Infirm, Publ Hlth England, Meningococcal Reference Unit, Manchester M13 9WZ, Lancs, England. [Bory, Sotharith] Calmette Hosp, Phnom Penh, Cambodia. [Carlos, Josefina] Univ East Ramon Magsaysay Mem Med Ctr, Quezon City, Philippines. [Caugant, Dominique A.] Norwegian Inst Publ Hlth, Oslo, Norway. [Chiou, Chien-Shun] Ctr Dis Control, Taipei, Taiwan. [Vo Thi Trang Dai; Phan Van Thanh] Pasteur Inst Ho Chi Minh City, Dept Microbiol & Immunol, Ho Chi Minh City, Vietnam. [Dinleyici, Ener Cagri] Eskisehir Osmangazi Univ, Eskisehir, Turkey. [Ghimire, Prakash] Tribhuvan Univ, Kathmandu, Nepal. [Handryastuti, Setyo; Putri, Nina Dwi] Dr Cipto Mangunkusumo Natl Cent Hosp, Jakarta, Indonesia. [Heo, Jung Yeon] Ajou Univ, Dept Infect Dis, Sch Med, Suwon, South Korea. [Jennison, Amy] Queensland Hlth, Coopers Plains, Australia. [Kamiya, Hajime] Natl Inst Infect Dis, Tokyo, Japan. [Sia, Loong Tonnii] Sarawak Gen Hosp, Kuching, Malaysia. [Marshall, Helen] Univ Adelaide, Adelaide Med Sch, Robinson Res Inst, Adelaide, SA, Australia. [Marshall, Helen] Univ Adelaide, Adelaide Med Sch, Dept Paediat, Adelaide, SA, Australia. [Saha, Senjuti] Child Hlth Res Fdn, Dhaka 1207, Bangladesh. [Shao, Zhujun; Zhu, Bingqing] Chinese Ctr Dis Control & Prevent, Natl Inst Communicable Dis Control & Prevent, Beijing, Peoples R China. [Sim, James Heng Chiak] Singapore Gen Hosp, Dept Microbiol, Singapore, Singapore. [Smith, Vinny] Meningitis Res Fdn, Bristol, Avon, England. [Taha, Muhamed-Kheir] Pasteur Inst, Paris, France. [Thisyakorn, Usa] Chulalongkorn Univ, Trop Med Cluster, Bangkok, Thailand. [Tshering, Kinley] Jigme</p>	INT	JUL TO DEC	Clinical Microbiology	WOS:000586323400004

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Dorji Wangchuck Natl Referral Hosp, Thimphu, Bhutan. [Vazquez, Julio] Inst Hlth Carlos III, Natl Reference Lab Meningococci, Madrid, Spain. [Veeraraghavan, Balaji] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Yezli, Saber] Global Ctr Mass Gatherings Med, Riyadh, Saudi Arabia.</p> <p>Borrow, R (corresponding author), Manchester Royal Infirm, Publ Hlth England, Meningococcal Reference Unit, Manchester M13 9WZ, Lancs, England. xilian.bai@phe.gov.uk; ray.borrow@phe.gov.uk; dominiqueandreeyvette.caugant@fhi.no; nipmcsc@cdc.gov.tw; jyeon78@naver.com; amy.jennison@health.qld.gov.au; jay.lucidarme@phe.gov.uk; helen.marshall@adelaide.edu.au; senjutasaha@chrfd.org; shaozhujun@icdc.cn; james.sim.h.c@singhealth.com.sg; vinnys@meningitis.org; muhamed-kheir.taha@pasteur.fr; jvazquez@isciii.es; vbalaji@cmcvellore.ac.in; zhubingqing@icdc.cn</p> <p>The degree of surveillance data and control strategies for invasive meningococcal disease (IMD) varies across the Asia-Pacific region. IMD cases are often reported throughout the region, but the disease is not notifiable in some countries, including Myanmar, Bangladesh and Malaysia. Although there remains a paucity of data from many countries, specific nations have introduced additional surveillance measures. The incidence of IMD is low and similar across the represented countries (<0.2 cases per 100,000 persons per year), with the predominant serogroups of Neisseria meningitidis being B, W and Y, although serogroups A and X are present in some areas. Resistance to ciprofloxacin is also of concern, with the close monitoring of antibiotic-resistant clonal complexes (e.g., cc4821) being a priority. Meningococcal vaccination is only included in a few National Immunization Programs, but is recommended for high-risk groups, including travellers (such as pilgrims) and people with complement deficiencies or human immunodeficiency virus (HIV). Both polysaccharide and conjugate vaccines form part of recommendations. However, cost and misconceptions remain limiting factors in vaccine uptake, despite conjugate vaccines preventing the acquisition of carriage. Crown Copyright (C) 2020 Published by Elsevier Ltd on behalf of The British Infection Association.</p>				
51.	<p>Babji, S., Manickavasagam, P., Chen, Y. H., Jeyavelu, N., Jose, N. V., Praharaaj, I., Syed, C., Kaliappan, S. P., John, J., Giri, S., Venugopal, S., Kampmann, B., Parker, E. P. K., Iturriza-Gómara, M., Kang, G., Grassly, N. C. and Uhlig, H. H.</p> <p>Immune predictors of oral poliovirus vaccine immunogenicity among infants in South India NPJ Vaccines; 2020, 5 27</p> <p>Address: 1Division of Gastrointestinal Sciences, Christian Medical College, Vellore, Tamil Nadu 632004 India. ISNI: 0000 0004 1767 8969. GRID: grid.11586.3b 2Translational Gastroenterology Unit, Nuffield Department of Medicine, and Department of Paediatrics, University of Oxford, Oxford, OX3 9DU UK. ISNI: 0000</p>	INT	JAN TO JUN	Gastrointestinal Sciences, Community Health	PMID:32218999 PMC ID: PMC7089977 WOS:000521270100001 SCOPUS H-INDEX:15 IF: 3.269 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>0004 1936 8948. GRID: grid.4991.5 3Department of Community Health, Christian Medical College, Vellore, Tamil Nadu 632004 India. ISNI: 0000 0004 1767 8969. GRID: grid.11586.3b 4The Vaccine Centre, London School of Hygiene and Tropical Medicine, London, WC1E 7HT UK. ISNI: 0000 0004 0425 469X. GRID: grid.8991.9 5Institute of Infection and Global Health, University of Liverpool, Liverpool, L69 7BE UK. ISNI: 0000 0004 1936 8470. GRID: grid.10025.36 6Department of Infectious Disease Epidemiology, Imperial College London, London, W2 1PG UK. ISNI: 0000 0001 2113 8111. GRID: grid.7445.2</p> <p>Identification of the causes of poor oral vaccine immunogenicity in low-income countries might lead to more effective vaccines. We measured mucosal and systemic immune parameters at the time of vaccination with oral poliovirus vaccine (OPV) in 292 Indian infants aged 6-11 months, including plasma cytokines, leukocyte counts, fecal biomarkers of environmental enteropathy and peripheral blood T-cell phenotype, focused on gut-homing regulatory CD4+ populations. We did not find a distinct immune phenotype associated with OPV immunogenicity, although viral pathogens were more prevalent in stool at the time of immunization among infants who failed to seroconvert (63.9% vs. 45.6%, p = 0.002). Using a machine-learning approach, we could predict seroconversion a priori using immune parameters and infection status with a median 58% accuracy (cross-validation IQR: 50-69%) compared with 50% expected by chance. Better identification of immune predictors of OPV immunogenicity is likely to require sampling of mucosal tissue and improved oral poliovirus infection models.</p>				
52.	<p>Babu Nelagondanahalli Manjunath, S., Alex, A. G., Varghese, L. and George, O. K. Bilateral origin of a split circumflex coronary artery BMJ case reports; 2020, 13 (9): Address: Cardiology, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India nmsbabu18@yahoo.com. Cardiology, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. Christian Medical College Vellore Association, Vellore, Tamil Nadu, India</p>	INT	JUL TO DEC	Cardiology	PMID: 32895256 PMC:7476456
53.	<p>Babu Nelagondanahalli Manjunath, S., Kumar Paramasivan, N., George, P. V. and George, O. K. Primary PCI in a nonagenarian: an uncommon predicament BMJ case reports; 2020, 13 (12): Address: Department of Cardiology, Christian Medical College and Hospital, Vellore, India nmsbabu18@yahoo.com. Department of Cardiology, Christian Medical College and Hospital, Vellore, India. Myocardial infarction in a nonagenarian is a morbid cardiac illness that can lead to significant mortality unless properly dealt with management aspects. Many comorbid or family-related issues might be part of holdbacks in management of such a group of patients. Hence, myocardial infarction in a nonagenarian where intervention is better treatment option forms an uncommon combination and has</p>	INT	JUL TO DEC	Cardiology	PMID: 33323422 PMC:7745334

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	many preprocedural, periprocedural and postprocedural difficulties related to multiple issues. Here, we present a case of nonagenarian who presented with extensive anterior wall MI and was successfully dealt with primary percutaneous coronary intervention despite periprocedural and intraprocedural difficulties.				
54.	<p>Babu, G., Prabhash, K., Chaturvedi, P., Kuriakose, M., Birur, P., Anand, A. K., Kaushal, A., Mahajan, A., Syiemlieh, J., Singhal, M., Gairola, M., Ramachandra, P., Goyal, S., John, S., Nayyar, R., Patil, V. M., Rao, V. H., Roshan, V. and Rath, G. K. Indian clinical practice consensus guidelines for the management of hypopharyngeal cancer Indian Journal of Cancer; 2020, 57 (5): 16-18</p> <p>Address: [Babu, Govind] Kidwai Mem Inst Oncol, Dept Med Oncol, Bangalore, Karnataka, India. [Prabhash, Kumar; Patil, Vijay M.] Tata Mem Hosp, Dept Med Oncol, Mumbai, Maharashtra, India. [Chaturvedi, Pankaj] Tata Mem Hosp, Dept Surg Oncol, Mumbai, Maharashtra, India. [Kuriakose, Moni] Cochin Canc Res Ctr, Dept Surg Oncol, Cochin, Kerala, India. [Birur, Praveen] KLESIDS, Dept Oral Med & Radiol, Bangalore, Karnataka, India. [Anand, Anil K.] Max Super Special Hosp, Dept Radiat Oncol, New Delhi, India. [Kaushal, Ashish] HCG Canc Ctr, Dept Med Oncol, Ahmadabad, Gujarat, India. [Mahajan, Abhishek] Tata Mem Hosp, Dept Radiodiagnosis & Imaging, Mumbai, Maharashtra, India. [Syiemlieh, Judita] Civil Hosp, Dept Radiat Oncol, Shillong, Meghalaya, India. [Singhal, Manish] Indraprastha Apollo Hosp, Dept Med Oncol, New Delhi, India. [Gairola, Munish] Rajiv Gandhi Canc Inst & Res Ctr, Dept Radiat Oncol, New Delhi, India. [Ramachandra, Prakash] Sri Shankara Canc Hosp & Res Ctr, Dept Radiat Oncol, Bangalore, Karnataka, India. [Goyal, Sumit] Rajiv Gandhi Canc Inst & Res Ctr, Dept Med Oncol, New Delhi, India. [John, Subashini] Christian Med Coll & Hosp, Dept Radiotherapy, Vellore, Tamil Nadu, India. [Nayyar, Rohit] Max Super Special Hosp, Dept Surg Oncol, New Delhi, India. [Rao, Vishal] HCG Canc Ctr, Dept Surg Oncol, Bangalore, Karnataka, India. [Roshan, Vikas] Shri Mata Vaishno Devi Narayana Superspecial Hosp, Dept Radiat Oncol, Jammu, Jammu & Kashmir, India. [Rath, G. K.] All India Inst Med Sci, Natl Canc Inst, Dept Radiat Oncol, Delhi, India. Prabhash, K (reprint author), Tata Mem Hosp, Dept Med Oncol, Mumbai, Maharashtra, India. kprabhash@gmail.com</p>	NAT	JAN TO JUN	Radiotherapy	<p>WOS:000518668700005 H-INDEX:36 IF: 0.429 BIOXBIO (2018/2019)</p>
55.	<p>Babu, N. S., Behera, D., Alex, A. G., Varghese, L. and George, O. K. Cardiac tumors in both twins - A case report of a rare occurrence Ann Pediatr Cardiol; 2020, 13 (3): 238-240 Address: Department of Cardiology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Cardiac tumors in neonates and infancy are one among the many known congenital cardiac diseases. Although fetal cardiac tumors are rare, there is increased detection because of expertise in echocardiographic examination. Rhabdomyomas are the most common cardiac tumors among infants and children. Here, we describe twin neonates who had multiple cardiac tumors. This kind of presentation</p>	INT	JUL TO DEC	Cardiology	<p>PMID: 32863661 PMC:7437622</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	appears to be a very rare situation.				
56.	<p>Babu, N. S., Vimala, L. R., Varghese, L. and George, O. K. An arcade in the heart: Multimodality imaging Ann Pediatr Cardiol; 2020, 13 (1): 95-97</p> <p>Address: Department of Cardiology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Radiology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Congenital mitral stenosis (MS) is a spectrum of anomalies that result in functional and anatomic obstruction of inflow into the left ventricle. Mitral arcade is one of the varieties of congenital MS where there is an abnormal development of chordae tendineae, resulting in stenosis, regurgitation, or both. Here, we describe the case of a mitral arcade in a child, which was diagnosed on echocardiography and confirmed with other imaging modalities.</p>	INT	JAN TO JUN	Cardiology, Radiology	<p>PMID:32030045 PMC ID: PMC6979019 SCOPUS H-INDEX:17 IF: 1.09 RG (2019)</p>
57.	<p>Baccarani, M., Iacobucci, I., Chiaretti, S., Fo, R., Balasubramanian, P., Paietta, E., Foroni, L., Jeromin, S., Izzo, B., Spinelli, O., Varma, N., Menif, S., Terragna, C., Seth, T., Bidet, A., Coriu, D., Lunghi, F., Mayer, J., Scappini, B., Langabeer, S., Maier, J., Burt, E., Candoni, A., Albano, F., Luppi, M., Zupan, I., Lion, T., Zadro, R., Di Raimondo, F., Poopak, B., Rege-Cambrin, G., Annunziata, M., Ayala, A., Salinas-Viedma, V., Prado, A. I., Milner, B., Galimberti, S., Janssen, J., Polli, V., Comba, L., Borsellino, B., Annibaldi, O., Crugnola, M. and Passamonti, F. In Ph+BCR-ABL1(P210+) acute lymphoblastic leukemia the e13a2 (B2A2) transcript is prevalent Leukemia; 2020, 34 (3): 929-931</p> <p>Address: [Baccarani, Michele; Terragna, Carolina] Bologna Univ, Inst Hematol L&A Seragnoli, Bologna, Italy. [Iacobucci, Ilaria] St Jude Childrens Canc Res Hosp, Dept Pathol, Memphis, TN USA. [Chiaretti, Sabina; Foa', Robin] Sapienza Univ, Dept Precis & Translat Med, Hematol, Rome, Italy. [Balasubramanian, Poonkuzhali] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Paietta, Elisabeth] Montefiore Med Ctr, ECOG ACRIN Leukemia Lab, New York, NY USA. [Foroni, Letizia] Hammersmith Hosp, London, England. [Jeromin, Sabine] Leukemia Lab GmbH, MLL Munich, Munich, Germany. [Izzo, Barbara] Univ Naples Federico II, Naples, Italy. [Spinelli, Orietta] ASST Papa Giovanni XXIII, Bergamo, Italy. [Varma, Neelam] PGIMER, Chandigarh, India. [Menif, Samia] Inst Pasteur, Tunis, Tunisia. [Seth, Tulika] AIIMS, New Delhi, India. [Bidet, Audrey] CHU Bordeaux Haut Leveque, Bordeaux, France. [Coriu, Daniel] Fundeni Clin Inst, Bucharest, Romania. [Lunghi, Francesca] San Raffaele Univ, Milan, Italy. [Mayer, Jiri] Univ Hosp, Brno, Czech Republic. [Mayer, Jiri] Masaryk Univ, Brno, Czech Republic. [Scappini, Barbara] AOU Careggi, Florence, Italy. [Langabeer, Stephen] St James Hosp, Dublin, Ireland. [Maier, Jacqueline] Univ Leipzig, Leipzig, Germany. [Burt, Emma] Royal London Hosp, London, England. [Candoni, Anna] Udine Univ, Udine, Italy. [Albano,</p>	INT	JAN TO JUN	Clinical Haematology	<p>WOS:000519468700024 SCOPUS H-INDEX:185 IF: 9.944 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Francesco] Bari Univ, Bari, Italy. [Luppi, Mario] Modena & Reggio Emilia Univ, Modena, Italy. [Zupan, Irena] Univ Clin Ctr, Ljubljana, Slovenia. [Lion, Thomas] Childrens Canc Res Inst, Vienna, Austria. [Zadro, Renata] Univ Hosp Ctr, Zagreb, Croatia. [di Raimondo, Francesco] Catania Univ, Catania, Italy. [Poopak, Behzad] Islamic Azad Univ, Tehran, Iran. [Poopak, Behzad] Payvand Lab, Tehran, Iran. [Rege-Cambrin, Giovanna] Turin Univ, Orbassano Hosp, Turin, Italy. [Annunziata, Mario] Cardarelli Hosp, Naples, Italy. [Ayala, Ana] Univ Nacl Asuncion, San Lorenzo, Paraguay. [Salinas-Viedma, Victor] Inst Previs Social, Asuncion, Paraguay. [Prado, Ana Ines] Hosp Maciel, Montevideo, Uruguay. [Milner, Benedict] NHS Grampian, Aberdeen, Scotland. [Galimberti, Sara] Pisa Univ, Pisa, Italy. [Janssen, Jeroen] Vrije Univ Amsterdam Med Ctr, Dept Hematol, Amsterdam, Netherlands. [Polli, Valentina] Infermi Hosp, Rimini, Italy. [Comba, Lorenzo] SC Hematol, Cuneo, Italy. [Borsellino, Beatrice] Ancona Univ, Ancona, Italy. [Annibaldi, Ombretta] Campus Univ, Rome, Italy. [Crugnola, Monica] Univ Hosp, Parma, Italy. [Passamonti, Francesco] Varese Univ, Varese, Italy. Baccarani, M (reprint author), Bologna Univ, Inst Hematol L&A Seragnoli, Bologna, Italy. michele.baccarani@unibo.it				
58.	Bagchi, A., Mccarty, D., Shields, J., Fields, E., Wandu, S., Archer, D., Velayudhan, S. R., Spencer, H. T. and Srivastava, A. Generation of Multi Modal Lentiviral Vectors for High-Level Fetal Hemoglobin Expression Molecular Therapy; 2020, 28 (4): 350-351 Address: [Bagchi, Abhirup; Velayudhan, Shaji R.; Srivastava, Alok] Christian Med Coll & Hosp , Ctr Stem Cell Res, Vellore , Tamil Nadu, India. [McCarty, David; Shields, Jordan; Fields, Earl; Wandu, Sylvia; Archer, David; Spencer, H. Trent] Emory Univ, Dept Pediat, Aflac Canc & Blood Disorders Ctr, Atlanta, GA USA.	INT	JAN TO JUN	Clinical Haematology	WOS:000530089301328 H-INDEX:168 IF: 8.402 RG (2018/2019)
59.	Baiges, A., Turon, F., Simón-Talero, M., Tasayco, S., Bueno, J., Zekrini, K., Plessier, A., Franchi-Abella, S., Guerin, F., Mukund, A., Eapen, C. E., Goel, A., Shyamkumar, N. K., Coenen, S., De Gottardi, A., Majumdar, A., Onali, S., Shukla, A., Carrilho, F. J., Nacif, L., Primignani, M., Tosetti, G., La Mura, V., Nevens, F., Witters, P., Tripathi, D., Tellez, L., Martínez, J., Álvarez-Navascués, C., Fraile López, M. L., Procopet, B., Piscaglia, F., De Koning, B., Llop, E., Romero-Cristobal, M., Tjwa, E., Monescillo-Francia, A., Senzolo, M., Perez-Lafuente, M., Segarra, A., Sarin, S. K., Hernández-Gea, V., Patch, D., Laleman, W., Hartog, H., Valla, D., Genescà, J., García-Pagán, J. C. and For the Rehevasc, Valdig an Easl Consortium Abernethy Group Congenital Extrahepatic Portosystemic Shunts (Abernethy Malformation): An International Observational Study Hepatology; 2020, 71 (2): 658-669 Address: Barcelona Hepatic Hemodynamic Laboratory, Liver Unit, Hospital Clínic de Barcelona, IDIBAPS, CIBERehd, Universitat de Barcelona, Barcelona, Spain Liver Unit, Department of Internal Medicine, Hospital Universitari Vall d'Hebrón,	INT	JAN TO JUN	Hepatology, Radiology	SCOPUS H-INDEX:347 IF: 14.971 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>VHIR, CIBERehd, Universitat Autònoma de Barcelona, Barcelona, Spain Pediatric Surgery Department, Hospital Universitari Vall d'Hebrón, Universitat Autònoma de Barcelona, Barcelona, Spain DHU Unity, Pôle des Maladies de l'Appareil Digestif, Service d'Hépatologie, Centre de Référence des Maladies Vasculaires du Foie, Hôpital Beaujon, AP-HP, Clichy, France Service d'Hépatologie et de Transplantation Hépatique et de radiologie Pédiatriques, Groupement Hospitalier Paris Sud (GHUPS), Hôpital Bicêtre, Le Kremlin Bicetre, France Department of Radiology, Institute of Liver and Biliary Sciences, New Delhi, India Hepatology Department, Christian Medical College, Vellore, India Department of Radiology, Christian Medical College, Vellore, India Department of Gastroenterology and Hepatology, Erasmus Medical Center, Rotterdam, Netherlands Hepatology, Clinic of Visceral Surgery and Medicine, Inselspital and Department of Clinical Research, University of Bern, Bern, Switzerland Sheila Sherlock Liver Unit and UCL Institute for Liver and Digestive Health, Royal Free Hospital and UCL, London, United Kingdom Department of Gastroenterology, Seth G S Medical College & KEM Hospital, Mumbai, Maharashtra, India Digestive Organ Transplantation Division, Department of Gastroenterology, Faculty of Medicine, University of São Paulo, São Paulo, Brazil A. M. e A. Migliavacca Center for Liver Disease, Division of Gastroenterology and Hepatology, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, University of Milan, Milan, Italy Fondazione IRCCS Ca' Granda, Ospedale Maggiore Policlinico, UOC Medicina Generale Emostasi e Trombosi, Milano, Italy Department of Gastroenterology and Hepatology, University Hospitals Leuven, KU Leuven, Leuven, Belgium Liver Unit, Queen Elisabeth Hospital, Birmingham, United Kingdom Department of Gastroenterology and Hepatology, Hospital Universitario Ramón y Cajal, IRYCIS, University of Alcalá, Madrid, CIBERehd, Spain Aparato Digestivo, Hospital Universitario Central de Asturias HUCA, Asturias, Spain Department of Gastroenterology, 3rd Medical Clinic, University of Medicine and Pharmacy "Iuliu Hatieganu", Regional Institute of Gastroenterology and Hepatology "O Fodor", Cluj-Napoca, Romania Unit of Internal Medicine, Department of Medical and Surgical Sciences, University of Bologna, S. Orsola-Malpighi Hospital, Bologna, Italy Division of Pediatric Gastroenterology, Erasmus MC-Sophia Children's Hospital, Rotterdam, Netherlands Liver Unit, Hospital U. Puerta de Hierro, Universidad Autónoma de Madrid, Madrid, Spain Digestive Diseases and Centro de Investigación Biomédica en Red de Enfermedades Hepáticas y Digestivas Hospital General Universitario Gregorio Marañón Instituto</p>				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>de Investigación Sanitaria Gregorio Marañón Facultad de Medicina, Universidad Complutense, Madrid, Spain Department of Gastroenterology and Hepatology, Radboud University Medical Centre, Nijmegen, Netherlands Digestive Disease Department, Complejo Hospitalario Universitario Insular-Materno Infantil, Las Palmas de Gran Canaria, Spain Multivisceral Transplant Unit, Department of Surgery, Oncology and Gastroenterology, Padua University Hospital, Padua, Italy Interventional Radiology Unit, Hospital Universitari Vall d'Hebrón, Universitat Autònoma de Barcelona, Barcelona, Spain Department of Hepatology, Institute of Liver and Biliary Sciences, New Delhi, India</p> <p>Congenital extrahepatic portosystemic shunt (CEPS) or Abernethy malformation is a rare condition in which splanchnic venous blood bypasses the liver draining directly into systemic circulation through a congenital shunt. Patients may develop hepatic encephalopathy (HE), pulmonary hypertension (PaHT), or liver tumors, among other complications. However, the actual incidence of such complications is unknown, mainly because of the lack of a protocolized approach to these patients. This study characterizes the clinical manifestations and outcome of a large cohort of CEPS patients with the aim of proposing a guide for their management. This is an observational, multicenter, international study. Sixty-six patients were included; median age at the end of follow-up was 30 years. Nineteen patients (28%) presented HE. Ten-, 20-, and 30-year HE incidence rates were 13%, 24%, and 28%, respectively. No clinical factors predicted HE. Twenty-five patients had benign nodular lesions. Ten patients developed adenomas (median age, 18 years), and another 8 developed HCC (median age, 39 years). Of 10 patients with dyspnea, PaHT was diagnosed in 8 and hepatopulmonary syndrome in 2. Pulmonary complications were only screened for in 19 asymptomatic patients, and PaHT was identified in 2. Six patients underwent liver transplantation for hepatocellular carcinoma or adenoma. Shunt closure was performed in 15 patients with improvement/stability/cure of CEPS manifestations. Conclusion: CEPS patients may develop severe complications. Screening for asymptomatic complications and close surveillance is needed. Shunt closure should be considered both as a therapeutic and prophylactic approach. © 2019 by the American Association for the Study of Liver Diseases.</p>				
60.	<p>Bakthavatchalam, Y. D., Shankar, A., Muniyasamy, R., Peter, J. V., Marcus, Z., Triplicane Dwarakanathan, H., Gunasekaran, K., Iyadurai, R. and Veeraraghavan, B. Levonadifloxacin, a recently approved benzoquinolizine fluoroquinolone, exhibits potent in vitro activity against contemporary Staphylococcus aureus isolates and Bengal Bay clone isolates collected from a large Indian tertiary care hospital J Antimicrob Chemother; 2020, 75 (8): 2156-2159</p> <p>Address: Department of Clinical Microbiology, Christian Medical College,</p>	INT	JAN TO JUN	Clinical Microbiology, Critical Care Medicine, Orthopaedics, Medicine Unit V	<p>PMID:32361727 H-INDEX:17 IF: 3.250 RESURCHIFY (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Vellore 632004, India. Department of Critical Care Medicine, Christian Medical College, Vellore 632004, India. Division of Infectious Disease, Henry Ford Health System, Detroit, MI 48202, USA. Department of Orthopaedics, Christian Medical College, Vellore 63200, India. Department of Medicine, Unit V, Christian Medical College, Vellore 632004, India.</p> <p>OBJECTIVES: Levonadifloxacin (WCK 771; IV) and its prodrug alalevonadifloxacin (WCK 2349; oral) are benzoquinolizine fluoroquinolones, recently approved in India for the treatment of acute bacterial skin and skin structure infections with concurrent bacteraemia and diabetic foot infections. Ahead of its market launch, the present study aimed to assess the in vitro activity of levonadifloxacin against contemporary Staphylococcus aureus isolates collected from a large tertiary care hospital in India. Additionally, levonadifloxacin activity was tested against hVISA and Bengal Bay clone MRSA isolates. METHODS: Non-duplicate S. aureus (n = 793) isolates collected at Christian Medical College Hospital, Vellore, India during 2013-19 were included in the study. MRSA isolates were identified using a cefoxitin disc diffusion assay. MICs of levonadifloxacin and comparator antibiotics were determined using the broth microdilution method. Mutations in QRDRs were identified for selected levofloxacin-non-susceptible isolates. MLST profiling was undertaken to detect the Bengal Bay clone. RESULTS: Among the 793 isolates, 441 (55.6%) were MRSA and 626 (78.9%) were non-susceptible to levofloxacin. Levonadifloxacin showed MIC50 and MIC90 values of 0.25 and 0.5 mg/L, respectively, for all S. aureus, which included hVISA and Bengal Bay clone MRSA. The potency of levonadifloxacin was 16 times superior compared with levofloxacin. CONCLUSIONS: The present study demonstrated potent activity of levonadifloxacin against contemporary S. aureus isolates, which included MRSA isolates, hVISA isolates, Bengal Bay clone isolates and a high proportion of quinolone-non-susceptible isolates. The potent activity of levonadifloxacin observed in this study supports its clinical use for the treatment of S. aureus infections.</p>				
61.	<p>Bakthavatchalam, Y. D., Shankar, A., Muthuirulandi Sethuvel, D. P., Asokan, K., Kanthan, K. and Veeraraghavan, B. Synergistic activity of fosfomycin-meropenem and fosfomycin-colistin against carbapenem resistant Klebsiella pneumoniae: an in vitro evidence Future Sci OA; 2020, 6 (4): Fso461</p> <p>Address: Department of Clinical Microbiology, Christian Medical College, Vellore 632004, India.</p> <p>AIM: To evaluate the antibacterial activity of fosfomycin-meropenem and fosfomycin-colistin combinations against carbapenem-resistant Klebsiella</p>	INT	JAN TO JUN	Clinical Microbiology	<p>PMID:32257374 PMC ID: PMC7117555 SCOPUS H-INDEX:185 IF: 5.113 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	pneumoniae (CR-Kp). METHODS: A total of 50 CR-Kp isolates recovered from blood cultures were included in this study. All the CR-Kp isolates were screened for the presence of carbapenem resistant genes bla (IMP). bla (VIM). bla (NDM). bla (OXA-48) like, bla (KPC). bla (GES).#x00A0;and bla (SPM). Combination testing of fosfomycin-meropenem and fosfomycin-colistin were performed using time-kill assay. RESULTS: Fosfomycin-meropenem combination showed synergy in 20% of the tested CR-Kp isolates. While, fosfomycin-colistin exhibited synergy against 16% of the isolates. A total of 68% (n = 34) of CR-Kp isolates were characterised as OXA-48-like producers and 22% (n = 11) as NDM producers. Synergistic activity of these combinations was observed against OXA-48, NDM and NDM + OXA-48 co-producers. CONCLUSION: Considerable synergistic antibacterial activity of fosfomycin-meropenem and fosfomycin-colistin was not observed against CR-Kp isolates. Therefore, these combinations may not be promising for infections associated with CR-Kp.				
62.	Bakthavatchalam, Y. D., Vasudevan, K., Amladi, A., Anandan, S., Peter, J. V. and Veeraraghavan, B. Hybrid assembly of multi-drug resistant, highly virulent methicillin resistant Staphylococcus aureus ST772-SCCmec V lineage: Maximising its potential for dissemination similar to USA300 clone Genomics; 2020, 112 (6): 5248-5253 Address: Department of Clinical Microbiology, Christian Medical College, Vellore, India. Department of Critical care unit, Christian Medical College, Vellore, India. Department of Clinical Microbiology, Christian Medical College, Vellore, India. Electronic Address: vbalaji@cmcvellore.ac.in.	INT	JUL TO DEC	Clinical Microbiology, Critical care unit, Clinical Microbiology	PMID: 32976975
63.	Bakthavatchalam, Y. D., Vasudevan, K., Neeravi, A., Perumal, R. and Veeraraghavan, B. First Draft Genome Sequence of Linezolid and Rifampicin Resistant Staphylococcus haemolyticus Japanese Journal of Infectious Diseases; 2020, 73 (4): 296-299 Address: [Bakthavatchalam, Yamuna Devi; Vasudevan, Karthick; Neeravi, Ayyanraj; Veeraraghavan, Balaji] Christian Med Coll & Hosp , Dept Clin Microbiol, Vellore 632004, Tamil Nadu, India. [Perumal, Rajamani] Christian Med Coll & Hosp , Dept Orthopaed, Vellore 632004, Tamil Nadu, India. Veeraraghavan, B (corresponding author), Christian Med Coll & Hosp , Dept Clin Microbiol, Vellore 632004, Tamil Nadu, India. vbalaji@cmcvellore.ac.in Linezolid resistance has increasingly been described in coagulase negative staphylococci (CoNS) in recent years. Here, we describe the molecular mechanism of linezolid resistance in Staphylococcus haemolyticus using whole genome sequencing. Three S. haemolyticus isolates (VB5326, VB19458, and VB840) carried G2576T mutation at the domain V of the 23S rRNA. In addition, VB5326 and VB19458 carried the cfr gene in the chromosome. The presence of cfr gene, in	INT	JUL TO DEC	Clinical Microbiology, Orthopaedics	WOS:000604406200008

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	combination with G2576T mutation in 23S rRNA, resulted in a high linezolid Minimum inhibitory concentration (MIC) of > 256 mu g/ml. Three mutations, including D471E, I527M, and S532N, in rpoB contributed to an increased rifampicin MIC of 32 mu g/ml. Subsequent development of linezolid and rifampicin resistance in <i>S. haemolyticus</i> is worrisome and greatly limits clinical management.				
64.	<p>Balaji, G., Arokiaraj, J., Nithyananth, M., Cherian, V. M. and Lee, V. Complex post traumatic foot deformities – Outcomes after corrective surgery Journal of Clinical Orthopaedics and Trauma; 2020, 11 (3): 432-437</p> <p>Address: Jawaharlal Institute of Postgraduate Medical Education and Research Pondicherry, India Christian Medical College, Vellore, India</p> <p>Introduction: Complex posttraumatic foot deformity results in painful foot, altered gait and affects cosmesis. We did a retrospective study on 16 patients to analyse the etiology, types of foot deformity and their outcomes after corrective surgery. Methods: This retrospective study was done on a consecutive series of patients who underwent corrective surgery for complex post-traumatic foot and ankle deformities. There were 16 patients with 18 foot deformities. The duration of deformity, soft tissues, radiographic changes and measurements, type and anatomic localisation of the deformity determined the surgery needed to correct the deformity. Results: Among the 18 foot injuries, 16 were open injuries. Among the type of foot deformity, isolated equinus deformity was seen in 12 feet followed by equinovarus and equinovavarus in three feet each. Seven patients needed modified footwear. None of the patients required walking aid for ambulation at the end of one year follow up. Conclusion: To conclude, soft tissue injuries were the most common cause of posttraumatic foot deformities compared to bony injuries. Equinus deformity was the commonest deformity. Fifteen patients returned to their preinjury work status. © 2019 Delhi Orthopedic Association</p>	NAT	JAN TO JUN	Orthopaedics	SCOPUS H-INDEX:15 IF: 4.154 BIOXBIO (2018/2019)
65.	<p>Balakrishnan, B., Illangeswaran, R. S. S., Rajamani, B. M., Pai, A. A., Raj, I. X., Paul, D. Z., Lakshmi, K., Mani, T., Mohanan, E., Kulkarni, U., Devasia, A. J., Fouzia, N. A., Korula, A., Abraham, A., Srivastava, A., Mathews, V., Paczesny, S., George, B. and Balasubramanian, P.</p> <p>Prognostic plasma biomarkers of early complications and graft-versus-host disease in patients undergoing allogeneic hematopoietic stem cell transplantation EJHaem; 2020, 1 (1): 219-229</p> <p>Address: Department of Haematology, Christian Medical College, Vellore, India. Department of Biostatistics, Christian Medical College, Vellore, India. Indiana University School of Medicine, Indianapolis, Indiana, USA.</p> <p>Early complications post hematopoietic stem cell transplantation (HSCT) such as sinusoidal obstruction syndrome (SOS) and graft versus host disease (GVHD) can be life threatening. Although several biomarkers have been identified to correlate with these complications and their response to treatment, these are yet to be used</p>	INT	JUL TO DEC	Haematology, Biostatistics	PMID: 32885223 PMC:7116009

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	in clinical practice. Here, we evaluated circulating endothelial cells (CECs) (n = 26) and plasma biomarkers (ST2, REG3α, VCAM1, ICAM1, TIM3) (N = 210) at early time points, to determine their association with early complications post-HSCT. Elevated CEC counts at the end of conditioning was associated with GVHD, indicating endothelial damage during HSCT. Plasma levels of REG3α, VCAM1, ICAM1, and TIM3 on day 14 (D14) and D14 ICAM1 and D28 ST2 were significantly higher in patients with SOS and aGVHD, respectively. Upon sub-group analysis, D28 ST2, D14/D28 REG3α, and D14ICAM1 levels were significantly higher in patients with gastrointestinal GVHD, while D28ST2 was higher in those with skin/liver GVHD. High ST2 levels on D28 was significantly associated with non-relapse mortality (NRM) and overall survival. Our results suggest that elevated ST2 levels on D28 could predict the likelihood of developing aGVHD and could influence NRM and OS.				
66.	<p>Balakrishnan, R., Sebastian, P., Rajkrishna, B., Venkatasai, J. P. and Backianathan, S. Radiotherapeutic management of brain tumours during the COVID-19 pandemic Journal of Radiotherapy in Practice; 2020, Address: Department of Radiation Oncology, Dr Ida B Scudder Cancer Centre, Christian Medical College, Tamil Nadu, Vellore, India</p> <p>Aim: The coronavirus disease (COVID-19) pandemic is bound to put tremendous pressure on the existing healthcare system. This aim of this technical note is to help in triaging patients with brain tumours who are sent for radiotherapy during this pandemic and to provide safe and evidence-based care. Materials and Methods: Published data for this review were identified by systematically searching PubMed database from November 2007 onwards with the following Medical Subject Heading (Mesh) terms 'Brain tumours', 'COVID-19', 'coronavirus', 'SARS-nCoV-2', 'Radiotherapy', 'guidelines' 'hypofractionation' using Boolean search algorithm. Articles in English language were reviewed. Results: We tried to apply the as low as reasonable achievable (ALARA) principle in triaging and management of patients for radiotherapy. We identified protocols which have hypofractionated regimens (reducing patient visits to hospital, time spent in treatment console) with similar outcomes when compared to conventional fractionated regimens and not overburdening the healthcare facility. We also identified the tumours for which we could safely avoid or delay the initiation of radiotherapy. Conclusion: Treatment decisions made during the COVID-19 pandemic rely on the safety first/do no harm principle and evidence-based prioritisation of cases for triage. This article is a tool to aid in triaging and prioritising brain tumour patient management. This is for consideration during the pandemic only and certainly not as a strategy for permanent practice change. © The Author(s), 2020. Published by Cambridge University Press.</p>	INT	JAN TO JUN	Radiation Oncology	<p>SCOPUS H-INDEX:13 IF: 0.410 RESURCHIFY (2018/2019)</p>
67.	<p>Baldia, M. and Rajshekhar, V. In Reply to the Letter to the Editor Regarding "Minimizing CSF Leak and Wound Complications in Tethered Cord Surgery with Prone Positioning: Outcomes in 350</p>	INT	JAN TO JUN	Neurological Sciences	PMID:32987607

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Patients" World Neurosurg; 2020, 142 571 Address: Department of Neurological Sciences, Christian Medical College Hospital, Vellore, India. Department of Neurological Sciences, Christian Medical College Hospital, Vellore, India. Electronic Address: rajshekhar@cmcvellore.ac.in.</p>				
68.	<p>Baldia, M. and Rajshekhar, V. Minimizing CSF Leak and Wound Complications in Tethered Cord Surgery with Prone Positioning: Outcomes in 350 Patients World Neurosurg; 2020, 137 e610-e617</p> <p>Address: Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, India. Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, India. Electronic Address: rajshekhar@cmcvellore.ac.in.</p> <p>BACKGROUND: We document the results of a protocol to reduce the incidence of cerebrospinal fluid (CSF) leak and other wound complications in patients undergoing tethered cord surgery (TCS). METHODS: Data from all patients undergoing TCS between January 2009 and April 2019 were reviewed retrospectively. Diagnosis (high risk or low risk; based on the presence of fascial and dural defects at surgery), type of graft used for dural or fascial repair, and CSF leak and other wound complications in the postoperative period were noted. All patients were nursed in the prone position with elevation of the foot end of the bed (Trendelenburg position) for at least 5 days after surgery with a subfascial drain in place. RESULTS: Of a total of 350 patients (191 high risk; 159 low risk), CSF leak from the wound was noted in 16 (4.5%). All but 4 of these patients were managed with wound suturing with or without insertion of a subcutaneous drain with continued nursing in the prone and Trendelenburg position. Two patients had meningitis and 3 patients had wound infection. Multivariate analysis revealed that the use of synthetic grafts ($P < 0.000$) and inability to close the dura ($P = 0.02$) were the only significant risk factors for CSF wound leak. Wound infections and/or dehiscence were noted in 17 (4.8%) other patients. CONCLUSION: Postoperative prone nursing with Trendelenburg position minimizes the incidence of CSF leak and other wound complications.</p>	INT	JAN TO JUN	Neurological Sciences	<p>PMID:32088374 WOS:000532726200022 SCOPUS H-INDEX:90 IF: 1.723 BIOXBIO (2018/2019)</p>
69.	<p>Baldia, M., Mani, S., Walter, N., Kumar, S., Srivastava, A. and Prabhu, K. Development of a Unique Mouse Intervertebral Disc Degeneration Model Using a Simple Novel Tool Asian Spine J; 2020, Address: Department of Neurological Sciences, Christian Medical College, Vellore, India. Department of Radiodiagnosis, Christian Medical College, Vellore, India. Department of Pathology, Christian Medical College, Vellore, India. Centre for Stem Cell Research (a Unit of inStem, Bengaluru), Christian Medical</p>	INT	JUL TO DEC	Neurological Sciences, Radiodiagnosis, Pathology, Centre for Stem Cell Research	PMID: 33355845

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>College Campus, Vellore, India. STUDY DESIGN: Animal case control study. PURPOSE: To create a simple, reproducible disc degeneration model for mouse coccygeal vertebrae. OVERVIEW OF LITERATURE: Back pain due to disc degeneration is probably the most common problem encountered in neurosurgical practice. An easily reproducible animal model for disc degeneration will help in understanding its pathophysiology, and serve as a platform for examining various therapeutic options. METHODS: A total of 18 mice were divided into injured (n=12) and non-injured (n=6) groups. The disc height index (DHI%) at coccygeal 4-5 level was measured by computed tomography (CT) scan for all mice. Coccygeal 4-5 discs of the injury group were injured using a 32G needle fixed to a novel tool and confirmed by CT. The non-injury group underwent no procedure. DHI% was measured by CT at 2-, 4-, and 6-week post-injury, and all mice tails were sectioned for histopathology grading of disc degeneration at the respective time intervals. RESULTS: The injured group showed significant variation in DHI% at 2, 4, and 6 weeks, whereas there was no change in the noninjured group. Histopathologic evaluation with Safranin O stain showed a worsening of the disc degeneration score at 2, 4, and 6 weeks in the injured group, but in the non-injured group there was no change. Percutaneous needle injury technique with our novel tool provided 100% accuracy and uniform degeneration. CONCLUSIONS: A simple, easily reproducible mouse model for disc degeneration was created using a simple, cost-effective, novel tool and technique, its advantage being high precision and user friendly.</p>				
70.	<p>Baldia, M., Rajaratnam, S. and Rajshekhar, V. Postoperative Hormonal Outcomes in Patients with Large and Giant Non-functioning Pituitary Adenomas Neurol India; 2020, 68 (Supplement): S106-S112 Address: Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, India. Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore, Tamil Nadu, India. OBJECTIVE AND AIMS: To study hormonal axis (HA) dysfunction pre-operatively and at three months after surgery in patients with large (>3 cms) (Hardy's grade C) and giant (>4 cms) nonfunctioning pituitary adenomas (NFPA). METHODS: One hundred thirty nine patients operated between 2006 and 2017, with 3 months post-operative hormonal evaluation, were included in this retrospective study. HA damage was categorized as 0 to 3 based on number of axes (thyrotroph, corticotroph and gonadotroph) that were affected. Risk factors studied for HA dysfunction before and after surgery included duration of symptoms, size of tumor, diabetes mellitus, hypertension and extent of resection. RESULTS: Preoperatively 45 (32.3%) had no axis involvement, 34 (24.4%), 36 (25.8%) and 24 (17.2%) had one, two and three axes involvement respectively. Thyrotroph axis was affected in most patients. Tumor volume had significant correlation with preoperative pituitary dysfunction (P < 0.000). Post-operatively HA function remained same in</p>	NAT	JUL TO DEC	Neurological Sciences, Endocrinology	PMID:32611900

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	100 (72%), improved in only 7 (5%) and worsened in 32 (23%) of the patients. Of the 3 HA, corticotroph function worsened in most patients. None of the patients who had dysfunction in all three axes had improvement after surgery. No significant risk factors were associated with post-operative pituitary function outcomes. Persistent diabetes insipidus was noted in six (4.3%) patients. CONCLUSION: Pre-operatively anterior pituitary dysfunction is noted in nearly two-thirds of patients with large and giant NFA. Tumor volume >15 cc had significant correlation with pre-operative panhypopituitarism. Post-operatively, pituitary function remains the same in nearly three quarters of the patients. No significant risk factors were found for post-operative hormonal outcomes.				
71.	Bandaru, S. V., Augustine, A. M., Lepcha, A., Sebastian, S., Gowri, M., Philip, A. and Mammen, M. D. The effects of N95 mask and face shield on speech perception among healthcare workers in the coronavirus disease 2019 pandemic scenario Journal of Laryngology and Otology; 2020, 134 (10): 895-898 Address: Department of Otorhinolaryngology, Christian Medical College, Vellore, India. Department of Audiology, Christian Medical College, Vellore, India. Department of Biostatistics, Christian Medical College, Vellore, India. OBJECTIVE: The current circumstances of the coronavirus disease 2019 pandemic necessitate the use of personal protective equipment in hospitals. N95 masks and face shields are being used as personal protective equipment to protect from aerosol-related spread of infection. Personal protective equipment, however, hampers communication. This study aimed to assess the effect of using an N95 mask and face shield on speech perception among healthcare workers with normal hearing. METHODS: Twenty healthcare workers were recruited for the study. Pure tone audiometry was conducted to ensure normal hearing. Speech reception threshold and speech discrimination score were obtained, first without using personal protective equipment and then repeated with the audiologist wearing an N95 mask and face shield. RESULTS: A statistically significant increase in speech reception threshold (mean of 12.4 dB) and decrease in speech discrimination score (mean of 7 per cent) was found while using the personal protective equipment. CONCLUSION: Use of personal protective equipment significantly impairs speech perception. Alternate communication strategies should be developed for effective communication.	INT	JUL TO DEC	Otorhinolaryngology, Audiology, Biostatistics	PMID: 32981539 PMC:7542317 WOS:000592175000011
72.	Bankar, A., Korula, A., Abraham, A., Viswabandya, A., George, B., Srivastava, A. and Mathews, V. Comparison of the Efficacy of Innovator Rituximab and its Biosimilars in Diffuse Large B Cell Lymphoma Patients: A Retrospective Analysis Indian J Hematol Blood Transfus; 2020, 36 (1): 71-77 Address: [Bankar, Aniket; Korula, Anu; Abraham, Aby; Viswabandya, Auro; George, Biju; Srivastava, Alok; Mathews, Vikram] Christian Med Coll & Hosp, Dept	INT	JAN TO JUN	Clinical Haematology	PMID:32174693 PMC ID: PMC7042466 WOS:000515630900010 SCOPUS H-INDEX:179 IF: 5.206 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Haematol, Vellore, India. Korula, A (reprint author), Christian Med Coll & Hosp, Dept Haematol, Vellore, India. anukorula@cmcvellore.ac.in GRID: grid.11586.3b. ISNI: 0000 0004 1767 8969</p> <p>Diffuse large B cell lymphoma (DLBCL) is the most common form of non-Hodgkin lymphoma among adults, although it also affects the young and the elderly. DLBCL is treated with a chimeric monoclonal antibody against CD20, a B cell surface protein, named rituximab, in combination with a multidrug chemotherapeutic regimen. However, owing to its high cost, rituximab cannot be afforded by patients in developing or underdeveloped countries. In such cases, biosimilars of rituximab have been used instead of rituximab, with equivalent efficacy. In this single center, retrospective, observational study, we have compared patient outcomes such complete response (CR), partial response (PR), and overall response rate (ORR) in a cohort of 152 patients in an Indian hospital, who were treated either with innovator rituximab or Reditux, a biosimilar. We observed that the ORRs of both groups (88% in innovator group and 82% in biosimilar group) were comparable. There was no statistically significant difference between the two groups in terms of CR (p = 0.353), PR (p = 0.42), ORR (p = 0.23), unfavorable responses, and stable or progressive disease (p = 0.42). The number of patients who died due to complications were few, and there was no significant difference between the two groups. The differences in the 3-year event-free survival and overall survival were not statistically significant. Biosimilar rituximab can suitably and safely replace the innovator rituximab for treatment of diffuse large B cell lymphoma.</p>				
73.	<p>Bankar, A., Korula, A., Kulkarni, U. P., Devasia, A. J., Fouzia, N. A., Lionel, S., Abraham, A., Balasubramanian, P., Janet, N. B., Nair, S. C., Sezlian, S., Jeyaseelan, V., Jeyaseelan, N., Prasad, J., George, B. and Mathews, V. Resource utilization and cost effectiveness of treating acute promyelocytic leukaemia using generic arsenic trioxide British Journal of Haematology; 2020, 189 (2): 269-278</p> <p>Address: Department of Hematology, Christian Medical College, Vellore, India Department of Immunohematology and Transfusion Medicine, Christian Medical College, Vellore, India Accounts Department, Christian Medical College, Vellore, India Department of Biostatistics, Christian Medical College, Vellore, India Department of Community Medicine, Christian Medical College, Vellore, India</p> <p>Arsenic trioxide (ATO)-based regimens are the standard of care for treating acute promyelocytic leukaemia (APL) and have replaced chemotherapy-based approaches. However, the cost of "patented" ATO is prohibitive because of patent rights. "Generic" ATO has been used in a few countries, but its implications for health resource utilization (HRU) and cost of treatment are unknown. We hypothesized that treating APL patients using generic ATO (APL-ATO) will be cost</p>	NAT	JAN TO JUN	Clinical Haematology, Immunohematology and Transfusion Medicine, Accounts, Biostatistics, Community Medicine	SCOPUS H-INDEX:15 IF: 0.869 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	effective compared to the chemotherapy-based regimen (APL-CT). In a single-centre retrospective study, we used a bottom-up costing method to compare the direct medical cost of treatment and HRU between APL-ATO and APL-CT. These costs and the survival and relapse probabilities were imputed in a three-state Markov decision model to estimate the cost effectiveness of APL-ATO compared to APL-CT. The mean cost of treatment for APL-ATO (n = 30, \$8500 ± 2078) was significantly less than for APL-CT (n = 30, \$22 600 ± 5528) (P < 0.001). APL-ATO reduced hospitalization, antibiotic and antifungal usage (P < 0.001). In the Markov model, five-year treatment costs were significantly lower for APL-ATO (\$11 131) than for APL-CT (\$17 926) (P < 0.001). Treatment cost and health resource utilization were significantly lower for generic ATO-treated APL patients compared to the chemotherapy-based regimen. © 2019 British Society for Haematology and John Wiley & Sons Ltd				
74.	<p>Barney, A. M., Abraham, V. J., Danda, S., Cherian, A. G. and Vanitha, S. Prevalence of Vitamin B12 Deficiency and Its Associated Risk Factors among Pregnant Women of Rural South India: A Community-based Cross-sectional Study Indian journal of community medicine : official publication of Indian Association of Preventive & Social Medicine; 2020, 45 (4): 399-404 Address: Department of Community Health, Vellore, Tamil Nadu, India. Department of Clinical Genetics, Christian Medical College, Vellore, Tamil Nadu, India. Department of Obstetrics and Gynecology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Clinical Biochemistry, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>INTRODUCTION: Vitamin B12 is essential for the normal functioning of the nervous system and for the formation of red blood cells. Vegetarian diet, low socioeconomic status, and social and religious reasons are known risk factors of its deficiency. Pregnant women, children, and the elderly are vulnerable groups. Indians have the highest prevalence, but the data among pregnant women in the rural setting is lacking. OBJECTIVES: The objective of this study is to assess the prevalence of Vitamin B12 deficiency and its associated factors among pregnant women of rural South India. MATERIALS AND METHODS: A cross-sectional study was conducted to recruit consecutive 120 multigravida women with ≤20 weeks of gestation, attending the mobile doctor run clinic of Kaniyambadi block, Vellore. A structured questionnaire was administered, and blood samples were collected. RESULTS: The prevalence of Vitamin B12 deficiency (<200 pgm/ml) and anemia (Hb ≤10.5 g/dL) was 55% and 17.5%, respectively. Only 11.7% were B12 deficient and anemic. Past history of abortion (odds ratio [OR] = 0.5), fatigue (OR = 0.4), and low B12 intake (OR = 2) was associated only in the bivariate analysis. First trimester (OR = 3.9) and obesity (OR = 9.6) were found to be independent risk factors of Vitamin B12 deficiency. CONCLUSION: Our study showed a high prevalence of Vitamin B12 deficiency in pregnancy in rural India. Some risk factors were identified. However,</p>	NAT	JUL TO DEC	Community Health, Clinical Genetics, Obstetrics and Gynecology, Clinical Biochemistry	PMID:33623189 PMC ID:7877432

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	studies with a higher sample size will be beneficial to study the associated risk factors better.				
75.	<p>Barney, Anitha Mohanraj, Isaac, Barney Thomas, Cherian, Anne George, Abraham, Vinod Joseph and Danda, Sumita Dietary Pattern and Factors Influencing Dietary Intake among Pregnant Women Consuming Vegetarian and Non-Vegetarian Diets in Rural South India</p> <p>The Indian Journal of Nutrition and Dietetics. Volume 57, Issue 2, April-June 2020 https://doi.org/10.21048/ijnd.2020.57.2.24511</p> <p>Affiliations Christian Medical College, Department of Community Health, Vellore, Tamilnadu, 632 004, India Christian Medical College, Department of Pulmonary Medicine, Vellore, Tamilnadu, 632 004, India Christian Medical College, Department of Obstetrics and Gynaecology, Vellore, Tamilnadu, 632 004, India Christian Medical College, Department of Clinical Genetics, Vellore, Tamilnadu, 632 004, India</p> <p>Nutrition is a science that studies food and how food nourishes the body and influences health. A well-balanced nutrient rich maternal diet throughout pregnancy leads to good foetal health and normal birth weight. Maternal nutritional deficiency eventually leads to adverse pregnancy and neonatal outcomes. Hence, this study was undertaken with the objective to assess the dietary pattern and factors influencing dietary habits among pregnant women in Kaniyambadi Block, Vellore, Tamil Nadu, India. A Food Frequency Questionnaire (FFQ) and a 24 hour recall method was used among the 120 consecutive multi-gravida pregnant mothers less than 20 weeks of gestation who attended the mobile clinic from the 89 villages of Kaniyambadi Block. Twenty four hours recall assessment showed daily calorie intake of the mothers ranged from 583 to 3532 kcal. The daily mean intake of calcium and B12 were 800 mg and 1.5 mcg respectively. Food Frequency Questionnaire (FFQ) found that all the pregnant women in the study had consumed rice, dal, roots, fats and oils and salt over a one-week period. None of the mothers had consumed alcohol or carbonated drinks. Milk was the only vitamin B12 containing food that was consumed daily. Cultural and religious factors, morning sickness and unavailability of food were found to be the factors influencing dietary intake. Food Frequency Questionnaire (FFQ) and 24 hour recall gave an insight into the dietary habits of rural pregnant women.</p>	NAT	JUL TO DEC	Community Health, Pulmonary medicine, Obstetrics and Gynaecology, Clinical Genetics	PMC 8607
76.	<p>Basu, S., Veeraraghavan, B., Ramaiah, S. and Anbarasu, A. Novel cyclohexanone compound as a potential ligand against SARS-CoV-2 main-protease Microb Pathog; 2020, 149</p>	INT	JUL TO DEC	Clinical Microbiology	WOS:000599711400004

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Address: [Basu, Soumya; Ramaiah, Sudha; Anbarasu, Anand] Vellore Inst Technol, Sch Biosci & Technol, Med & Biol Comp Lab, Vellore 632014, Tamil Nadu, India. [Veeraraghavan, Balaji] Christian Med Coll & Hosp, Dept Clin Microbiol, Vellore 632004, Tamil Nadu, India.</p> <p>Anbarasu, A (corresponding author), Vellore Inst Technol, Sch Biosci & Technol, Med & Biol Comp Lab, Vellore 632014, Tamil Nadu, India.</p> <p>soumya.basu@vit.ac.in; vbalaji@cmcvellore.ac.in; sudhaanand@vit.ac.in; aanand@vit.ac.in</p> <p>No commercially available drug candidate has yet been devised which is unique to and not repurposed against SARS-CoV-2 and has high efficacy or safe toxicity profile or both. Taking curcumin as a reference compound, we identified a new commercially available cyclohexanone compound, ZINC07333416 with binding energy (-8.72 kcal/mol) better than that of popularly devised anti-Covid-19 drugs like viral protease inhibitor Lopinavir, nucleoside analogue Remdesivir and the repurposed drug hydroxychloroquine when targeted to the active-site of SARS-CoV-2 Main protease (Mpro) through docking studies. The ligand ZINC07333416 exhibits crucial interactions with major active site residues of SARS-CoV-2 Mpro viz. Cys145 and His41 involving in the protease activity; as well as GLU-166 and ASN-142 which plays the pivotal role in the protein-dimerization. The proteinligand stable interaction was further confirmed with molecular dynamics simulation (MDS) studies. Based on virtual assessment, ZINC07333416 also have significant values in terms of medicinal chemistry, pharmacokinetics, synthetic accessibility and anti-viral activity that encourage its experimental applications against COVID-19.</p>				
77.	<p>Benjamin, R. N., Thomas, M., Muthusamy, K., Yoganathan, S., Mathew, V., Chacko, A. G., Prabhu, K. and Chacko, G.</p> <p>Age-Dependent Reduction in Severity and Discrete Topographical Patterns in Rasmussen Encephalitis: A Link to Cortical Maturation?</p> <p>Pediatr Neurol; 2020, 112 25-33</p> <p>Address: Associate Professor, Neurology, Department of Neurosciences, Christian Medical College, Vellore, India. Electronic Address: rohit.benjamin@cmcvellore.ac.in.</p> <p>Professor and Head, Paediatric Neurology, Department of Neurosciences, Christian Medical College, Vellore, India.</p> <p>Professor, Paediatric Neurology, Department of Neurosciences, Christian Medical College, Vellore, India.</p> <p>Professor and Head, Neurology, Department of Neurosciences, Christian Medical College, Vellore, India.</p> <p>Professor, Neurosurgery, Department of Neurosciences, Christian Medical College, Vellore, India.</p> <p>Professor of Neuropathology and Head, General Pathology, Department of General Pathology, Christian Medical College, Vellore, India.</p>	INT	JUL TO DEC	Neurology, Paediatric Neurology, Neurosurgery	PMID:32911260

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>BACKGROUND: Autopsy studies in Rasmussen encephalitis reveal areas of sparing within the affected hemisphere. Clinical progression and inflammation are milder with an older onset. We sought to demonstrate radiological corroboration for these patterns. METHODS: In our retrospective study, 38 cases were dichotomized into severe pan-hemispheric (all lobes involved) and sub-hemispheric groups (others) to identify age demographics and other severity predictors. The extent and patterns of radiological pathology in the cortex and subcortical structures were assessed by structured visual grading. Relevant clinical data were also reported. RESULTS: Children with pan-hemispheric involvement were younger at onset ($P < 0.001$) and were more likely to present with status epilepticus (odds ratio 8.5, 95% confidence interval 1.5 to 50.0, $P = 0.022$). A history of perinatal asphyxia/hospitalization ($P < 0.001$) and delayed milestones ($P = 0.013$) were encountered exclusively in this group, and progression to a low-amplitude record background on electroencephalography, suggesting that cortical damage was identified frequently ($P = 0.038$, odds ratio = 5.7, 95% confidence interval 1.3 to 25.0). Visual grading revealed significant differences among both cortical ($P < 0.001$) and subcortical ($P < 0.001$) regions. On multivariate analysis, the odds for pan-hemispheric disease decreased per year of age at onset ($P = 0.022$, odds ratio 0.51, 95% confidence interval 0.085 to 0.725). Epilepsy surgery ($n = 14$) was associated with Engel Class 1 seizure control ($P < 0.001$). Immunosuppressive therapy ($n = 20$) did not demonstrate a significant seizure remission ($P = 0.157$, odds ratio 0.39, 95% confidence interval 0.10 to 1.55). CONCLUSIONS: Our case series confirms the presence of specific topographical patterns of macroscopic radiological pathology over the affected hemisphere with a marked age-associated reduction in the odds for severe pan-hemispheric disease.</p>				
78.	<p>Benjamin, R., Hilda, Y., Swati, R., Annie, P., Manisha, B. and Jiji, E. M. Audit of level II scans in a tertiary center of a middle-income country (MIC) J Family Med Prim Care; 2020, 9 (7): 3242-3245 Address: Department of Neonatology, Christian Medical College, Vellore, Tamil Nadu, South India. Department of Obstetrics and Gynaecology, Christian Medical College, Vellore, Tamil Nadu, South India. CONTEXT: Significant anomalies are those that are lethal or those that require prolonged follow-up and unaffordable treatments. Detection of these anomalies allows early termination or the support systems necessary for pregnancies with these diagnoses. Anxiety associated with overdiagnosis makes the woman a victim of modern imaging technology. However, accurate detection of significant anomalies in a busy scan room of a developing country with the need to cater to large numbers is particularly challenging. AIMS: The aim was to audit the diagnostic accuracy in a busy scan room. SETTINGS AND DESIGN: Retrospective cohort in a tertiary center. METHODS AND MATERIALS: Audit of significant anomalies identified at the 20-week scan was performed after the expected date of confinement. Anomalies that were missed or overdiagnosed were noted.</p>	NAT	JUL TO DEC	Neonatology, Obstetrics and Gynaecology	PMID: 33102277 PMC:7567275

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	STATISTICAL ANALYSIS USED: All the categorical variables in this research were summarized using counts and percentages. RESULTS: Twenty-eight thousand women underwent morphology ultrasound during the study period. 963 (3.4%) women were detected to have anomalies at birth. Multiple anomalies were seen in 285 (30%) cases and isolated ones in 678 (70%) cases. Anomalies of the genitourinary system were the commonest followed by the anomalies of central nervous system. Only 53 (0.2%) anomalies were missed. They were mainly syndromes and anomalies of the cardiovascular system. The most significant anomalies that were identified could be diagnosed with a basic ultrasound machine. CONCLUSIONS: 910/963 (95%) of significant anomalies can be identified even in busy centers if a systematic assessment approach is ensured.				
79.	<p>Bhagwat, S. S., Hariharan, P., Joshi, P. R., Palwe, S. R., Shrivastava, R., Patel, M. V., Devanga Ragupathi, N. K., Bakthavatchalam, Y. D., Ramesh, M. S., Soman, R. and Veeraraghavan, B.</p> <p>Activity of cefepime/zidebactam against MDR Escherichia coli isolates harbouring a novel mechanism of resistance based on four-amino-acid inserts in PBP3 J Antimicrob Chemother; 2020, 75 (12): 3563-3567 Address: Wockhardt Research Centre, Aurangabad, India. Department of Clinical Microbiology, Christian Medical College, Vellore, India. Department of Infectious Disease, Henry Ford Hospital, Detroit, MI, USA. Department of Infectious Diseases, Jupiter Hospital, Pune, India.</p> <p>BACKGROUND: Recent reports reveal the emergence of Escherichia coli isolates harbouring a novel resistance mechanism based on four-amino-acid inserts in PBP3. These organisms concomitantly expressed ESBLs or/and serine/metallo-carbapenemases and were phenotypically detected by elevated aztreonam/avibactam MICs. OBJECTIVES: The in vitro activities of the investigational antibiotic cefepime/zidebactam and approved antibiotics (ceftazidime/avibactam, ceftolozane/tazobactam, imipenem/relebactam and others) were determined against E. coli isolates harbouring four-amino-acid inserts in PBP3. METHODS: Whole-genome sequenced E. coli isolates (n=89) collected from a large tertiary care hospital in Southern India (n=64) and from 12 tertiary care hospitals located across India (n=25) during 2016-18, showing aztreonam/avibactam MICs ≥ 1 mg/L (≥ 4 times the aztreonam epidemiological cut-off) were included in this study. The MICs of antibiotics were determined using the reference broth microdilution method. RESULTS: Four-amino-acid inserts [YRIK (n=30) and YRIN (n=53)] were found in 83/89 isolates. Among 83 isolates, 65 carried carbapenemase genes [blaNDM (n=39), blaOXA-48-like (n=11) and blaNDM+blaOXA-48-like (n=15)] and 18 isolates produced ESBLs/class C β-lactamases only. At least 16 unique STs were noted. Cefepime/zidebactam demonstrated potent activity, with all isolates inhibited at ≤ 1 mg/L. Comparator antibiotics including ceftazidime/avibactam and imipenem/relebactam showed limited activities. CONCLUSIONS: E. coli isolates concurrently harbouring four-amino-acid inserts in PBP3 and NDM are an emerging therapeutic challenge.</p>	INT	JUL TO DEC	Clinical Microbiology	PMID:32772098 WOS:000593526100018

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Assisted by the PBP2-binding action of zidebactam, the cefepime/zidebactam combination overcomes both target modification (PBP3 insert)- and carbapenemase (NDM)-mediated resistance mechanisms in E. coli.				
80.	<p>Bhandari, N., Antony, K., Balraj, V., Rongsen-Chandola, T., Kumar, T., Sinha, B., Goyal, N., Guleri, R., Bavdekar, A., Juvekar, S., Dayma, G., Patwardhan, V., Patil, A., Kang, G., Mohan, V. R., Srinivasan, R., Naaraayan, S. A., Reddy, S., Bhan, M. K., Rao, T. S., Parashar, U., Muliyl, J. P., Tate, J., Andrews, N. J., Samuel, P., Ganesan, S. K., Taneja, S., Choudhary, T. S., Bhatnagar, V., Gupta, A. K., Kabra, M. and Early Rollout Of, Rotavac@India Network</p> <p>Assessment of risk of intussusception after pilot rollout of rotavirus vaccine in the Indian public health system Vaccine; 2020,</p> <p>Address: Centre for Health Research and Development, Society for Applied Studies, New Delhi, India PATH, India District Health Office, Ministry of Health, Kangra, Himachal Pradesh, India KEM Hospital Research Centre, Pune, Maharashtra, India State Family Welfare Bureau, Public Health Services, Government of MaharashtraMaharashtra, India Christian Medical College, Vellore, Tamil Nadu, India Department of Pediatrics, Institute of Child Health, Chennai, India Department of Community Medicine, Santhiram Medical College and General Hospital, Andhra Pradesh, Hyderabad, India Indian Institute of Technology, New Delhi, India Viral Gastroenteritis Branch, Centers for Disease Control and Prevention, Atlanta, United States Public Health England, London, United Kingdom All India Institute of Medical Sciences, New Delhi, India</p> <p>Background: Pre-licensure trials of ROTAVAC® were not adequately powered to assess risk of intussusception, a rare adverse event associated with other rotavirus vaccines in some settings. We examined the risk of intussusception after ROTAVAC® vaccination among Indian infants during pilot rollout of the vaccine in the public health system in three states - Himachal Pradesh, Maharashtra and Tamil Nadu. Methods: Passive surveillance for intussusception was set up in 35 sentinel health facilities covering 26.3 million populations in the three states under monitoring of an Interministerial-Interagency Steering Committee. Clinical and immunization data were collected by independent teams. An expert committee blinded to vaccination status, classified intussusception cases using Brighton criteria. The self-controlled case-series method was used to estimate risk of intussusception (Brighton Level 1) after ROTAVAC® vaccination. Results: 151 intussusception cases were included in the analysis. The relative incidence (incidence during the risk period compared to the control period) 1–21 days after</p>	INT	JAN TO JUN	Community Medicine	<p>SCOPUS H-INDEX:175 IF: 3.269 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	doses 1 and 2 combined was 1.56 (95% CI, 0.0–5.28) and that for three doses combined was 1.88 (95% CI, 0.76–4.30). Attributable risk 1–21 days after doses 1 and 2 combined was 0.11 (95% CI, 0.0–0.25) and that for 3 doses combined was 0.42 (95% CI, 0.0–0.70) per 100,000 doses. Conclusions: No increased risk of intussusception within 21 days of receipt of the first two doses combined or all 3 doses combined of ROTAVAC® was detected. © 2020 The Author(s)				
81.	<p>Bhat, S., Raj, R., Danewa, A., Kharya, G., George, B., Intezar, M., Rastogi, N., Mathews, V., Shobha, B., Bakane, A., Uppuluri, R. and Yadav, S. P. Haploidentical Hematopoietic Stem Cell Transplantation in Pediatric Patients: A Multicentre Study from India Bone Marrow Transplantation; 2020, 55 (SUPPL 1): 633-634 Address: [Bhat, Sunil; Danewa, Arun; Shobha, Badiger] Narayana Hlth City, Mazumdar Shaw Med Ctr, Bangalore, Karnataka, India. [Raj, Revathi; Uppuluri, Ramya] Apollo Hosp, Chennai, Tamil Nadu, India. [Kharya, Gaurav; Bakane, Atish] Indraprastha Apollo Hosp, Delhi, India. [George, Biju; Mathews, Vikram] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Intezar, Mehdi] HCG Hosp, Bangalore, Karnataka, India. [Rastogi, Neha; Yadav, Satya Prakash] Medanta, Delhi, India.</p>	INT	JUL TO DEC	Clinical Haematology	WOS:000600556202240
82.	<p>Bhatia, P., Totadri, S., Singh, M., Sharma, P., Trehan, A., Bansal, D., Jain, R., Varma, N., Sachdeva, M. S. and Patra, N. PEST domain NOTCH mutations confer a poor relapse free survival in pediatric T-ALL: Data from a tertiary care centre in India Blood Cells Molecules and Diseases; 2020, 82 6</p> <p>Address: [Bhatia, Prateek; Singh, Minu; Trehan, Amita; Bansal, Deepak; Jain, Richa; Patra, Nilamani] Postgrad Inst Med Educ & Res, Dept Pediat, Pediat Hematol Oncol Unit, Chandigarh, India. [Totadri, Sidharth] Christian Med Coll & Hosp, Dept Pediat Hematol Oncol, Vellore, Tamil Nadu, India. [Sharma, Praveen; Varma, Neelam; Sachdeva, Manupdes S.] Postgrad Inst Med Educ & Res, Dept Hematol, Chandigarh, India. Bhatia, P (reprint author), PGIMER, Adv Pediat Ctr, Dept Pediat, Pediat Hematol Oncol Unit, Chandigarh 160012, India. prateekbhatia@rediffmail.com</p> <p>A comprehensive genotype-phenotype analysis of pediatric T-ALL data was performed. 33 confirmed pediatric (<= 12 y) T-ALL samples were evaluated for oncogenic transcripts: TLX-1, TLX-3, common fusion of STIL-TAL1, NOTCH1 mutations and copy number variations (CNVs). Mean WBC was 235.69 x 10(3)/mu L. TLX1 and TLX-3 overexpression detected in 1 (3%) and 7 (21%) patients and STIL-TALI in 8 (27%). NOTCH1 mutations were noted in 17 (52%), of which 12 (71%) in HD domain and 6 (35%) in PEST domain (including one case with mutations in all three domains). Commonest CNVs were CDKN2A (85%) and CDKN2B (75%). Relapse occurred in 8 (24%) patients. The median follow-up was</p>	INT	JAN TO JUN	Clinical Haematology	WOS:000521506900008 SCOPUS H-INDEX:85 IF: 2.305 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	15 months (range: 0.5-36). Bulky liver (p = 0.025), day 35 marrow (p = 0.004) and NOTCH mutation (p = 0.046) were predictive of time to an event. RFS was significantly poor for cases with PEST Vs. HD domain mutations (50% Vs. 85%) (p = 0.0009). Though cases with PEST domain NOTCH mutations had poor RFS, the OS was not influenced by NOTCH mutation positivity.				
83.	<p>Bhatla, N., Meena, J., Gupta, K., Pal, B., Divakar, H., Bhalerao, S., Peedicayil, A., Srivastava, S., Basu, P. and Purandare, C. N.</p> <p>Human papillomavirus vaccination: Good clinical practice recommendations from the Federation of Obstetric and Gynecological Societies of India J Obstet Gynaecol Res; 2020, 46 (9): 1651-1660</p> <p>Address: All India Institute of Medical Sciences, New Delhi, India. Ramakrishna Mission Seva Pratisthan and Vivekananda Institute of Medical Sciences, Kolkata, India. Apollo Clinic, Kolkata, India. Divakar's Specialty Hospital, Bengaluru, India. Reliance HNH, Saifee and Bhatia Hospitals, Mumbai, India. Christian Medical College, Vellore, India. Population Services International (PSI), Delhi, India. Early Detection and Prevention Section(EDP)/Screening Group (SCR) International Agency for Research on Cancer, World Health Organization, Lyon, France. Breach Candy Hospital and Research Centre, Mumbai, India.</p> <p>Human papillomavirus (HPV) vaccination offers an excellent prospect for the primary prevention of cervical cancer. The bivalent and quadrivalent vaccines are both available in India. The nonavalent vaccine is licensed but not yet available. However, there still remain controversies regarding the vaccination of older women, immunocompromised females and other special groups. To provide recommendations for HPV vaccination in India. The Federation of Obstetric and Gynecological Societies of India (FOGSI) convened an expert group on cervical cancer prevention to formulate good clinical practice recommendations (GCPR) with respect to vaccine efficacy and safety, target groups, optimal timing and dosing schedules. HPV vaccines are licensed for females aged 9-45 years in India and have been seen to be safe and effective. FOGSI recommends HPV vaccination of all girls <15 years of age as the best target group, in whom two-doses at an interval of 6 months, extendable to 18 months, are recommended. Three-doses are recommended in girls >15 years of age, immunocompromised persons and sexual assault survivors. Older women and women with abnormal screening results may be vaccinated with an understanding that vaccination does not protect against already acquired infections and screening has to continue. Single-dose vaccination results are promising. Increased awareness is required to reduce vaccine hesitancy. HPV vaccination should be the priority to achieve the elimination of cervical cancer.</p>	INT	JUL TO DEC	Obstetrics and Gynaecology	PMID:32627278

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	The introduction of affordable HPV vaccines and reduced dose schedules will improve coverage.				
84.	<p>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 Indian J Tuberc; 2020, 67 (1): 105-111</p> <p>Address: Post Graduate Resident, Community Health Department, Christian Medical College, Vellore 632002, Tamil Nadu, India. Professor & Director, B. V. Moses Centre for Evidence-Informed Health Care & Health Policy, Christian Medical College, Vellore, India. Professor, Department of Microbiology, Christian Medical College, Vellore, India. Professor, Department of Pulmonary Medicine, Christian Medical College, Vellore, India. Professor, Department of Internal Medicine, Christian Medical College, Vellore, India. Associate Professor, Department of Internal Medicine, Christian Medical College, Vellore, India. Professor, Department of Community Health, Christian Medical College, Vellore, India. Professor, Department of Community Health, Christian Medical College, Vellore, India. Electronic Address: jasminep@cmcvellore.ac.in.</p> <p>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</p>	NAT	JAN TO JUN	Community Medicine, Cochrane , Microbiology, Pulmonary Medicine, Internal Medicine	<p>PMID:32192603 SCOPUS H-INDEX:19 IF: 0.380 RG (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	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.				
85.	<p>Bhowmick, K., Boopalan, Prjvc, Gunasekeran, C., Livingston, A. and Jepegnanam, T. S. Management of Chronic Infected Intra-Articular Fractures of the Proximal Tibia with Ilizarov Ring Fixation Journal of Knee Surgery; 2020, 33 (2): 213-221</p> <p>Address: [Bhowmick, Kaushik; Boopalan, P. R. J. V. C.; Gunasekeran, Chandrasekaran; Livingston, Abel; Jepegnanam, Thilak Samuel] Christian Med Coll & Hosp, Dept Orthopaed, Unit 3,Paul Brand Bldg, Vellore 632004, Tamil Nadu, India. Bhowmick, K (reprint author), Christian Med Coll & Hosp, Dept Orthopaed, Unit 3,Paul Brand Bldg, Vellore 632004, Tamil Nadu, India. kaushikbhowmick97@yahoo.co.in</p> <p>Infected nonunion and malunion of tibial plateau are rare injuries with no standardized protocols for treatment. This study assessed the outcome of chronic infected intra-articular proximal tibial fractures with and without metaphyseal bone loss managed with the Ilizarov ring fixator. A series of six patients of intra-articular infected nonunion of the tibial plateau and two patients with malunited plateau with metaphyseal nonunion were treated in a tertiary care hospital. Three of these eight patients had a metaphyseal bone loss or bone gap after debridement and underwent internal transport with distal corticotomy to obtain the bone length. The remaining five patients underwent static ring fixation after correction of the articular deformity. Clinical evaluation was done by Knee Society Score, Rasmussen radiological and Association for the Study and Application of Methods of Ilizarov scores. All patients but one achieved union with the ring fixator. The average follow-up was 33 months (range, 12-120 months). Average time to achieve union was 11.5 months (range, 3-30). The scores were good in four patients and poor in the rest four, out of which three had undergone internal transport. Proximal tibia intra-articular infected nonunion and malunion with or without metaphyseal bone loss can be treated successfully with the Ilizarov fixator. Malunion of the tibial plateau has to be addressed in cases with varus alignment of the limb or articular step-off of ≥ 5mm between the two tibial surfaces. Patients with associated metaphyseal bone loss tend to have complications and take a longer duration to heal. Single-stage treatment avoids intra-articular malunion and loss of limb alignment.</p>	INT	JAN TO JUN	Orthopaedics Unit III	WOS:000512537700017 SCOPUS H-INDEX:55 IF: 3.149 BIOXBIO (2018/2019)
86.	<p>Bhowmick, K., Matthai, T., Boopalan, P. R. J. and Jepegnanam, T. S. Decision making in the management of malunion and nonunion of intertrochanteric fractures of the hip</p>	INT	JUL TO DEC	Orthopaedics	PMID: 31304795

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Hip Int; 2020, 30 (6): 793-798 Address: Department of Orthopaedics, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. AIM: Intertrochanteric fractures account for almost 50% of hip fractures. Nonunion and malunion of these fractures are relatively uncommon. This study reviews the outcome of 31 cases of intertrochanteric fracture failures. An algorithm for the management of these injuries is also proposed. METHODS: 19 patients with intertrochanteric malunion and 12 patients with non-union were included in this study. Treatment of these injuries was initiated according to the algorithm proposed in this study. Treatment outcomes were evaluated by assessing union, pre and postoperative shortening and HSA (head-shaft angle). Functional outcomes were assessed by the Parker mobility scale and presence or absence of pain. RESULTS: All the patients with intertrochanteric malunion with follow-up had united. The postoperative shortening in all patients were ≤ 2.5 cms. Patients having intertrochanteric nonunion with follow-up, who underwent internal fixation had united with an acceptable Parker mobility scale score, except in 1 patient who sustained an ipsilateral distal femur fracture. The average HSA correction obtained was 21° (range $3-60^\circ$). CONCLUSION: The algorithm proposed in this study helps streamline the treatment according to each case scenario. It helps in planning and managing patients with intertrochanteric fracture failure</p>				
87.	<p>Binu, A. J., Rajan, S. J., Rathore, S., Beck, M., Regi, A., Thomson, V. S. and Sathyendra, S. Peripartum cardiomyopathy: An analysis of clinical profiles and outcomes from a tertiary care centre in southern India Obstet Med; 2020, 13 (4): 179-184 Address: Department of General Medicine, Unit - III (Obstetric Medicine), Christian Medical College, Vellore, India. Department of Obstetrics, Christian Medical College, Vellore, India. Department of Cardiology, Christian Medical College, Vellore, India. Peripartum cardiomyopathy is a syndrome of maternal heart failure with decreased left ventricular ejection fraction affecting maternal and fetal well-being. We analysed clinical profiles and outcomes in women with peripartum cardiomyopathy enrolled retrospectively from a tertiary care centre in southern India (1 January 2008-31 December 2014). The incidence of peripartum cardiomyopathy was one case per 1541 live births. Fifty-four women with a mean age of 25.5 years and mean gestational age of 35.4 weeks were recruited; 35 were primigravidae. Maternal and fetal deaths occurred in 9.3% and 24.1% of subjects, respectively. Mild-to-moderate maternal anaemia (80-110 g/L) was associated with fetal mortality ($p=0.02$). Reduced left ventricular ejection fraction ($<30\%$, $p=0.04$) and cardiogenic shock ($p=0.01$) were significantly associated with adverse maternal outcomes. Forty per cent of women were followed up after 24.2 ± 17.7 months, and in these women a significant increase in left ventricular ejection fraction was seen (mean 16.4%, $p<0.01$); all were asymptomatic.</p>	INT	JUL TO DEC	General Medicine, Unit - III (Obstetric Medicine), Obstetrics, Cardiology	PMID: 33343694 PMC:7726167

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Peripartum cardiomyopathy with poor left ventricular ejection fraction and shock is associated with adverse maternal outcomes, while non-severe maternal anaemia predisposes to adverse fetal outcomes. Significant left ventricular ejection fraction recovery occurred on follow-up.				
88.	<p>Bliss J, Inja DB, Nithyananth M, Cherian VM. Quadriceps-splitting midline approach in the treatment of distal femur infected nonunion with stiff knee and severely scarred soft tissues. Int J Res Orthop 2020;6:276-80 Address: Department of Orthopaedics, Unit 1, Christian Medical College, Vellore, Tamil Nadu, India</p> <p>Background: Treatment of infected distal femur non-union with a stiff knee and severely scarred soft tissues is a challenging problem. We describe a method of addressing the non-union using quadriceps splitting approach to the distal femur. Methods: We retrospectively reviewed 5 patients with distal femur infected nonunion and knee stiffness, who, after infection control, required distal femur bone grafting. All patients had autogenous iliac crest bone grafting of the distal femur using the quadriceps splitting approach. The parameters assessed were the time to surgical wound healing, wound infection, time to bony union, and if any additional procedures were needed. Results: 5 patients were referred with distal femur infected non-union in addition to knee stiffness, with or without an implant in situ. All patients underwent debridement, implant exit, and external fixation of the femur spanning the knee as the primary surgery here, followed later on by iliac crest bone grafting of the distal femur using the above approach. All patients united well within 12 to 16 weeks, without the need for additional procedures. Conclusions: In the presence of pre-existing knee stiffness with severely scarred and contracted soft tissues the quadriceps-splitting approach is a useful method to address bony problems in the distal femur, without the need for a separate procedure for soft tissue or flap cover. Keywords: Infected non-union, Distal femur, Quadriceps-splitting</p>				
89.	<p>Boddu, Deepthi, Apoorva, G., John, Rikki, Hephzibah, Julie and Mathew, Leni G. PROGNOSTIC IMPLICATION OF INTERIM PET CT IN PAEDIATRIC HODGKIN LYMPHOMA Pediatric Blood & Cancer; 2020, 67 S174-S175</p>	INT	JAN TO JUN	Clinical Haematology, Pediatric Haematology	WOS:000530720700332 H-INDEX:100 IF: 2.486 BIOXBIO (2018/2019)
90.	<p>Bondu, J. D., Nellickal, A. J., Jeyaseelan, L. and Geethanjali, F. S. Assessing Diagnostic Accuracy of Serum Holotranscobalamin (Active-B12) in Comparison with Other Markers of Vitamin B12 Deficiency Indian Journal of Clinical Biochemistry; 2020, 35 (3): 367-372</p> <p>Address: Department of Clinical Biochemistry, Christian Medical College, Vellore, Tamil Nadu 632004, India Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India</p>	NAT	JAN TO JUN	Clinical Biochemistry, Biostatistics	PMID: 32647416 PMC:7326863 SCOPUS H-INDEX:38 IF: 0.200 RG (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>About 15-40% India is Vitamin B12 deficient (commonly diagnosed by total Vitamin B12) but, as only holoTC (active form) is taken up by body cells, thus measuring holoTC is more reflective of Vitamin B12 status than the former. We aimed to assess diagnostic accuracy of serum holoTC in comparison with total Vitamin B12 and total Homocysteine (HCY) as indicator of serum Vitamin B12 status. 217 human subjects (99 males and 118 females) ranging from 17 to 83 years were divided into Vitamin B12 deficient (n = 70), borderline (n = 100) and sufficient groups (n = 47) who were further assessed for markers of Vitamin B12 deficiency—holoTC, HCY, Mean Corpuscular Volume (MCV), Folate, hemoglobin and creatinine. Samples were analysed using Siemens Advia Centaur Xpi. Total Vitamin B12 deficient group had - 84.3% holoTC deficient; 15.7% holoTC sufficient; 72.9% with elevated HCY; 27.1% with normal HCY; 11.4% with megaloblastic anaemia. Borderline group had - 34% holoTC deficient; 28% elevated HCY. A strong positive correlation was found between Total Vitamin B12 and holoTC (r = 0.754, p = <0.001) but strong negative correlation existed between holoTC and HCY (r = - 0.471, p = <0.001). Concordance between Total Vit B12 and HCY (Kappa index = 0.51, p < 0.001); between holoTC and HCY (Kappa index = 0.52, p = <0.001) were statically significant but the latter had a better sensitivity and specificity. Also, statically significant association exists between Total Vitamin B12 and holoTC with HCY (p = <0.001). Therefore, it is ascertained that Active Vitamin B12 assay is a better test and can be considered as an early marker of vitamin B12 deficiency. © 2019, Association of Clinical Biochemists of India.</p>				
91.	<p>Borlot, F., Abushama, A., Morrison-Levy, N., Jain, P., Vinayan, K. P., Abukhalid, M., Aldhalaan, H. M., Almuzaini, H. S., Gulati, S., Hershkovitz, T., Konanki, R., Lingappa, L., Luat, A. F., Shafi, S., Tabarki, B., Thomas, M., Yoganathan, S., Alfadhel, M., Arya, R., Donner, E. J., Ehaideb, S. N., Gowda, V. K., Jain, V., Madaan, P., Myers, K. A., Otsubo, H., Panda, P., Sahu, J. K., Sampaio, L. P. B., Sharma, S., Simard-Tremblay, E., Zak, M. and Whitney, R.</p> <p>KCNT1-related epilepsy: An international multicenter cohort of 27 pediatric cases Epilepsia; 2020, 61 (4): 679-692</p> <p>Address: [Borlot, Felipe; Abushama, Ahmed; Morrison-Levy, Nadine; Jain, Puneet; Donner, Elizabeth J.; Otsubo, Hiroshi; Zak, Maria; Whitney, Robyn] Hosp Sick Children, Dept Paediat, Div Neurol, Toronto, ON, Canada. [Morrison-Levy, Nadine] Childrens Hosp Eastern Ottawa, Ottawa, ON, Canada. [Jain, Puneet] Danat Al Emarat Hosp Women & Children, Dept Pediat, Div Pediat Neurol, Abu Dhabi, U Arab Emirates. [Vinayan, Kollencheri Puthenveetil] Amrita Inst Med Sci, Dept Pediat Neurol, Cochin, Kerala, India. [Abukhalid, Musaad; Aldhalaan, Hesham M.; Almuzaini, Hanin S.] King Faisal Specialist Hosp & Res Ctr, Dept Neurosci, Riyadh, Saudi Arabia. [Gulati, Sheffali; Panda, Prateek] All India Inst Med Sci, Ctr Excellence & Adv Res Childhood Neurodev Disor, Dept Pediat, Child Neurol Div, New Delhi, India. [Hershkovitz, Tova] Rambam Med Ctr, Genet Inst, Haifa, Israel. [Konanki,</p>	INT	JAN TO JUN	Paediatric Neurology	<p>WOS:000528031000011 SCOPUS H-INDEX:184 IF: 5.562 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Ramesh; Lingappa, Lokesh] Rainbow Childrens Hosp, Dept Neurol, Hyderabad, India. [Luat, Aimee F.] Wayne State Univ, Childrens Hosp Michigan, Sch Med, Detroit Med Ctr, Detroit, MI USA. [Shafi, Shatha; Tabarki, Brahim] Prince Sultan Mil Med City, Div Neurol, Dept Pediat, Riyadh, Saudi Arabia. [Thomas, Maya; Yoganathan, Sangeetha] Christian Med Coll & Hosp, Dept Neurol Sci, Pediat Neurol, Vellore, Tamil Nadu, India. [Alfadhel, Majid; Ehaideb, Salleh N.] King Saud bin Abdulaziz Univ Hlth Sci, King Abdullah Int Med Res Ctr, Minist Natl Guard Hlth Affairs, King Abdulaziz Med City, Riyadh, Saudi Arabia. [Alfadhel, Majid] King Abdul Aziz Med City, Div Genet, Minist Natl Guard Hlth Affairs, Dept Pediat, Riyadh, Saudi Arabia. [Arya, Ravindra] Cincinnati Childrens Hosp Med Ctr, Comprehens Epilepsy Ctr, Div Neurol, Cincinnati, OH 45229 USA. [Arya, Ravindra] Univ Cincinnati, Coll Med, Dept Pediat, Cincinnati, OH USA. [Gowda, Vykuntaraju K.] Indira Gandhi Inst Child Hlth, Bangalore, Karnataka, India. [Jain, Vivek] Santokba Durlabhji Hosp, Jaipur, Rajasthan, India. [Madaan, Priyanka; Sahu, Jitendra K.] Postgrad Inst Med Educ & Res, Dept Pediat, Pediat Neurol Unit, Chandigarh, India. [Myers, Kenneth A.; Simard-Tremblay, Elisabeth] McGill Univ, Montreal Childrens Hosp, Dept Pediat, Div Neurol, Hlth Ctr, Montreal, PQ, Canada. [Myers, Kenneth A.; Simard-Tremblay, Elisabeth] McGill Univ, Dept Neurol & Neurosurg, Hlth Ctr, Montreal, PQ, Canada. [Myers, Kenneth A.] McGill Univ, Res Inst, Hlth Ctr, Montreal, PQ, Canada. [Sampaio, Leticia P. B.] Univ Sao Paulo, Fac Med, Dept Neurol, Sao Paulo, Brazil. [Sharma, Suvasini] Lady Harding Med Coll, Dept Pediat, Neurol Div, New Delhi, India. [Sharma, Suvasini] Kalawati Saran Childrens Hosp, New Delhi, India. Whitney, R (reprint author), Hosp Sick Children, Div Neurol, 555 Univ Ave, Toronto, ON M5G 1X8, Canada. robbyn.whitney@sickkids.ca</p> <p>Objective Through international collaboration, we evaluated the phenotypic aspects of a multiethnic cohort of KCNT1-related epilepsy and explored genotype-phenotype correlations associated with frequently encountered variants. Methods A cross-sectional analysis of children harboring pathogenic or likely pathogenic KCNT1 variants was completed. Children with one of the two more common recurrent KCNT1 variants were compared with the rest of the cohort for the presence of particular characteristics. Results Twenty-seven children (15 males, mean age = 40.8 months) were included. Seizure onset ranged from 1 day to 6 months, and half (48.1%) exhibited developmental plateauing upon onset. Two-thirds had epilepsy of infancy with migrating focal seizures (EIMFS), and focal tonic seizures were common (48.1%). The most frequent recurrent KCNT1 variants were c.2800G>A; p.Ala934Thr (n = 5) and c.862G>A; p.Gly288Ser (n = 4). De novo variants were found in 96% of tested parents (23/24). Sixty percent had abnormal magnetic resonance imaging (MRI) findings. Delayed myelination, thin corpus callosum, and brain atrophy were the most common. One child had gray-white matter interface indistinctness, suggesting a malformation of cortical development. Several antiepileptic drugs (mean = 7.4/patient) were tried, with no consistent response to any one agent. Eleven tried quinidine; 45% had marked (>50% seizure reduction) or some improvement (25%-50% seizure reduction). Seven used</p>				

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	cannabidiol; 71% experienced marked or some improvement. Fourteen tried diet therapies; 57% had marked or some improvement. When comparing the recurrent variants to the rest of the cohort with respect to developmental trajectory, presence of EIMFS, >500 seizures/mo, abnormal MRI, and treatment response, there were no statistically significant differences. Four patients died (15%), none of sudden unexpected death in epilepsy. Significance Our cohort reinforces common aspects of this highly pleiotropic entity. EIMFS manifesting with refractory tonic seizures was the most common. Cannabidiol, diet therapy, and quinidine seem to offer the best chances of seizure reduction, although evidence-based practice is still unavailable.				
92.	<p>Brown, H. C., Doering, C. B., Herzog, R. W., Ling, C., Markusic, D. M., Spencer, H. T. and Srivastava, A.</p> <p>Development of a Clinical Candidate AAV3 Vector for Gene Therapy of Hemophilia B</p> <p>Hum Gene Ther; 2020, 31 (19-20): 1114-1123</p> <p>Address: Expression Therapeutics, Tucker, Georgia, USA.</p> <p>Department of Pediatrics, Aflac Cancer and Blood Disorders Center, Emory University School of Medicine, Atlanta, Georgia, USA.</p> <p>Department of Pediatrics, Herman B Wells Center for Pediatric Research, Indiana University School of Medicine, Indianapolis, Indiana, USA.</p> <p>State Key Laboratory of Genetic Engineering, School of Life Sciences, Fudan University, Shanghai, China.</p> <p>Department of Haematology, Christian Medical College and Centre for Stem Cell Research (a Unit of inStem, Bengaluru), Vellore, Tamil Nadu, India.</p> <p>Division of Cellular and Molecular Therapy, Departments of Pediatrics and Molecular Genetics and Microbiology, Powell Gene Therapy Center, University of Florida College of Medicine, Gainesville, Florida, USA.</p> <p>Although recombinant adeno-associated virus serotype 8 (AAV8) and serotype 5 (AAV5) vectors have shown efficacy in Phase 1 clinical trials for gene therapy of hemophilia B, it has become increasingly clear that these serotypes are not optimal for transducing primary human hepatocytes. We have previously reported that among the 10 most commonly used AAV serotypes, AAV serotype 3 (AAV3) vectors are the most efficient in transducing primary human hepatocytes in vitro as well as in "humanized" mice in vivo, and suggested that AAV3 vectors expressing human coagulation factor IX (hFIX) may be a more efficient alternative for clinical gene therapy of hemophilia B. In the present study, we extended these findings to develop an AAV3 vector incorporating a compact yet powerful liver-directed promoter as well as optimized hFIX cDNA sequence inserted between two AAV3 inverted terminal repeats. When packaged into an AAV3 capsid, this vector yields therapeutic levels of hFIX in hemophilia B and in "humanized" mice in vivo. Together, these studies have resulted in an AAV3 vector predicted to achieve clinical efficacy at reduced vector doses, without the need for immune-suppression, for clinical gene therapy of hemophilia B.</p>	INT	JUL TO DEC	Haematology, Centre for Stem Cell Research	PMID: 32657150 PMC:7585622

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
93.	<p>Brown, H., Doering, C. B., Herzog, R. W., Ling, C., Markusic, D. M., Spencer, H. T., Srivastava, A. and Srivastava, A. Development of a Clinical Candidate AAV3 Vector for the Potential Gene Therapy of Hemophilia B Molecular Therapy; 2020, 28 (4): 261-261</p> <p>Address: Emory Univ, Pediat, Atlanta, GA 30322 USA. [Brown, Harrison; Doering, Christopher B.; Spencer, H. Trent] Emory Univ, Atlanta, GA 30322 USA. [Herzog, Roland W.; Markusic, David M.] Indiana Univ Sch Med, Pediat, Indianapolis, IN 46202 USA. [Ling, Chen] Fudan Univ, Genet Engn, Shanghai, Peoples R China. [Srivastava, Alok] Christian Med Coll & Hosp, Hematol, Vellore, Tamil Nadu, India. [Srivastava, Arun] Univ Florida, Pediat, Gainesville, FL USA.</p>	INT	JAN TO JUN	Centre for Stem Cell Research	<p>WOS:000530089301138 H-INDEX:168 IF: 8.402 RG (2018/2019)</p>
94.	<p>Chacko, B. Kidney Injury in Sepsis: Fuel to the Fire Indian J Crit Care Med; 2020, 24 (4): 216-217</p> <p>Address: Medical Intensive Care Unit, Division of Critical Care, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>How to cite this article: Chacko B. Kidney Injury in Sepsis: Fuel to the Fire. Indian J Crit Care Med 2020;24(4):216-217.</p>	NAT	JAN TO JUN	Medical Intensive Care	<p>PMID:32565629 PMC ID: PMC7297247 H-INDEX:27 IF: 0.590 RG (2018/2019)</p>
95.	<p>Chacko, S. R., Abraham, A. P., Asha, H. S., Kapoor, N., Rajaratnam, S. and Chacko, A. G. Selective perioperative steroid supplementation protocol in patients undergoing endoscopic transsphenoidal surgery for pituitary adenomas Acta Neurochir (Wien); 2020, 162 (10): 2381-2388 Address: Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, 632004, India. Department of Endocrinology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, 632004, India. arichacko@cmcvellore.ac.in. BACKGROUND: There is no consensus regarding the use of perioperative steroids for transsphenoidal pituitary surgery. We audited the effectiveness and safety of our selective perioperative steroid supplementation protocol in patients with pituitary adenomas. METHODS: Two hundred ninety-seven patients underwent 306 endoscopic transsphenoidal surgeries for removal of their pituitary tumors. Steroids were given to those with an impaired hypothalamic-pituitary-adrenal (HPA) axis, age ≥ 60 years, clinical apoplexy, hyponatremia, or if the pituitary gland was not preserved at surgery. We excluded 111 patients in whom the integrity of the HPA axis could not be determined. We compared the incidence of early postoperative adrenal insufficiency and complications in 135 patients with intact HPA axes who underwent surgery without steroids (group A) with 60 patients who</p>	INT	JUL TO DEC	Neurological Sciences, Endocrinology	<p>PMID: 32772164</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	had compromised preoperative HPA axes and received perioperative steroids (group B). In addition, we audited the total number of protocol violations during this period. RESULTS: Five patients (3.7%) in group A developed postoperative hypocortisolemia. There was no significant difference in the incidence of cerebrospinal fluid leak, diabetes insipidus, or hyponatremia between both groups. There were protocol deviations in 47 (15.4%) patients. Twenty one of these patients did not receive perioperative steroids in violation of the protocol, of whom 4 (19%) developed postoperative hypocortisolemia. CONCLUSIONS: Our steroid sparing protocol was both safe and effective. The 15% incidence of protocol deviations is a reminder that the rigorous usage of checklists is mandatory for successful clinical practice.				
96.	<p>Chanda, R., Kandagaddala, M., Moses, V., Sigamani, E., Keshava, S. N. and Janakiraman, R. Role of Ultrasound Acoustic Radiation Force Impulse in Differentiating Benign from Malignant Superficial Lymph Nodes J Clin Imaging Sci; 2020, 10 18</p> <p>Address: Department of Radiology, Christian Medical College, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Departments of General Pathology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Departments of Head and Neck Surgery, Christian Medical College and Hospital, Vellore, Tamil Nadu, India.</p> <p>OBJECTIVE: The purpose of this study was to evaluate the diagnostic performance of acoustic radiation force impulse (ARFI) imaging in differentiating benign from malignant peripheral lymphadenopathy. MATERIALS AND METHODS: This was a prospective study approved by the Institutional Review Board with financial grant for the same. Ultrasound and ARFI imaging of peripheral lymph nodes were performed and correlated with pathological results, which were used as the reference standard. The virtual touch tissue imaging and virtual touch tissue quantification parameters of ARFI were analyzed in 86 lymph nodes, of which 78 were included in the study. Using receiver operating characteristic curve analysis, the diagnostic usefulness of ARFI values were evaluated with respect to their sensitivity, specificity, and area under the curve. RESULTS: The mean area ratio of benign lymph nodes was 0.88 (± 0.2) and that of malignant lymph nodes was 1.17 (± 0.14). The mean shear wave velocities (SWV) of benign and malignant lymph nodes were 2.02 m/s (± 0.94) and 3.7 m/s (± 2.27), respectively. The sensitivity and specificity of virtual touch imaging area ratio in differentiating benign from malignant lymph nodes was 97% and 77%, of SWV was 71% and 70%, and of SWV ratio was 68% and 79%, respectively. CONCLUSION: As ARFI was found to have a superior diagnostic performance over conventional ultrasound and color Doppler in the characterization of lymph nodes, we recommend its routine use in</p>	INT	JAN TO JUN	Radiology, General Pathology, Head and Neck Surgery	PMID:32363080 PMC ID: PMC7193147 H-INDEX:15 IF: 1.750 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
97.	<p>differentiating benign from malignant nodes.</p> <p>Chandiraseharan, V. K., Kalimuthu, M., Prakash, T. V., George, T., Rajenesh, A., Jayaseelan, V. and Sudarsanam, T. D.</p> <p>Acute kidney injury is an independent predictor of in-hospital mortality in a general medical ward: A retrospective study from a tertiary care centre in south India</p> <p>Indian J Med Res; 2020, 152 (4): 386-392</p> <p>Address: Department of Internal Medicine, Christian Medical College & Hospital, Vellore, Tamil Nadu, India.</p> <p>Department of Biostatistics, Christian Medical College & Hospital, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND & OBJECTIVES: : Acute kidney injury (AKI) has been identified as an independent risk factor for mortality in intensive care units. This retrospective study was conducted to determine the effect of AKI on in-hospital mortality in a general medical ward of a tertiary care hospital and risk factors for mortality in patients with AKI. METHODS: : Demographic and clinical details, and outcome data were collected from case records of patients. In all hospitalized patients, factors associated with increased in-hospital mortality, such as AKI, inotrope requirement, mechanical ventilation and primary disease were compared between patients who died during their hospital stay and those who were discharged alive. Among the hospitalized patients, who had AKI, likely predictors of in-hospital mortality were compared between dead and alive patients at discharge. Factors that were significant in univariate analysis were tested by multivariate regression analysis to identify those that independently predicted poor outcomes. RESULTS: : Of the 1150 patients admitted in a general medical ward in a year, 220 patients were identified to have AKI. In-hospital mortality rate among patients with AKI was 19.09 per cent as compared to 1.8 per cent without AKI [adjusted odds ratio (OR) 5.7 (95% CI: 1.56-20.74)]. The presence of AKI was an independent risk factor for death, with an adjusted OR of 6.0 [95% CI: 1.67-21.6]. Among patients with AKI, the presence of haematological malignancy, adjusted OR 25.86 (95% CI: 1.81-369.58), requirement of inotrope, adjusted OR 126.5 (95% CI: 19.39-825.93) and serum creatinine at admission (P<0.001) were found to be independent predictors of death. The presence of underlying chronic kidney disease and hospital-acquired AKI were not found to have an association with mortality. INTERPRETATION & CONCLUSIONS: : The study showed the in-hospital mortality rate among patients with AKI in a general medical ward was 19.09 per cent. The occurrence of AKI was an independent risk factor for death, with haematological malignancy, use of vasopressors and higher serum creatinine at admission, significantly associated with death among patients with AKI. Large prospective studies need to be done to better understand the outcomes in AKI and the ways to present and manage AKI.</p>	NAT	JUL TO DEC	Internal Medicine, Biostatistics	PMID: 33380703
98.	<p>Chandramohan, A., Bhat, T. A., John, R. and Simon, B.</p> <p>Multimodality imaging review of complex pelvic lesions in female pelvis</p> <p>The British journal of radiology; 2020, 93 (1116): 20200489</p>	INT	JUL TO DEC	Radiology	PMID: 32886534 PMC:7716001

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Address: Department of Radiology, Christian Medical College, Vellore, India. Complex pelvic lesions can originate from various anatomical structures in the pelvis and pose a diagnostic dilemma due to a wide range of possible diagnoses. Accurate characterisation of these lesions would often require an algorithmic approach, which incorporates clinical findings, sequential use of multiple imaging modalities and a multiparametric approach. This approach usually aims at identifying key imaging features, which aid in anatomical localisation, morphology and tissue characterisation. There have been various attempts to standardise the lexicon used for describing adnexal masses in female patients; stratify their risk of cancer and suggest appropriate next steps in the management pathway. Through this review, we extend this approach to complex pelvic masses in female pelvis in general and will focus on optimal use of different imaging modalities to arrive at definitive diagnosis or meaningful differential diagnosis. We will also discuss potential pitfalls of imaging diagnosis and common mimics.</p>				
99.	<p>Chandramohan, A., Siddiqi, U. M., Mittal, R., Eapen, A., Jesudason, M. R., Ram, T. S., Singh, A. and Masih, D. Diffusion weighted imaging improves diagnostic ability of MRI for determining complete response to neoadjuvant therapy in locally advanced rectal cancer Eur J Radiol Open; 2020, 7 100223</p> <p>Address: Department of Radiology, Christian Medical College, Vellore, 632004, India. Department of Colorectal Surgery, Christian Medical College, Vellore, 632004, India. Department of Radiation Oncology, Christian Medical College, Vellore, 632004, India. Department of Medical Oncology, Christian Medical College, Vellore, 632004, India. Department of Pathology, Christian Medical College, Vellore, 632004, India.</p> <p>PURPOSE: To assess the diagnostic performance, interobserver agreement and confidence level for determining response to neoadjuvant chemoradiotherapy (NACRT) using morphology based MR-tumour regression grade (MR TRG), diffusion weighted imaging (DWI) patterns and their combination in patients with locally advanced rectal cancer. METHODS: This was a retrospective study including patients with locally advanced rectal cancer treated with NACRT and subsequent surgery. Two independent radiologists blinded to the histopathology reviewed staging and restaging MRI. Diagnostic performance of morphology based MR-TRG, DWI patterns and their combination for determining complete (CR) and incomplete (IR) response was assessed with pathological response as the reference. Likert's scale was used to assess the radiologist's level of confidence. Interobserver agreement was determined using Kappa statistics. RESULTS: The study included 251 patients (mean age of 47.9+/-14 (range 19-86) years, M:F =</p>	INT	JAN TO JUN	Radiology, Colorectal Surgery, Radiation Oncology, Medical Oncology, Pathology	<p>PMID:32140502 PMC ID: PMC7044654 SCOPUS H-INDEX:12 IF: 1.770 RESURCHIFY (2018/2019)</p>

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	164:87). Rate of pathological CR was 14.7 % (n = 37). Pattern based interpretation of DWI and combined approach (DWI + T2-HR) had superior diagnostic performance than morphology based assessment alone with area under curve (AUC) for T2HR, DWI and their combination being 0.531, 0.887, 0.874 respectively for observer 1 and 0.558, 0.653, 0.678 respectively for observer 2, p < 0.001. Interobserver agreement was substantial (k = 0.688) for combined approach, moderate (k = 0.402) for DWI patterns and fair (k = 0.265) for T2 HR MRI with both observers exhibiting highest level of confidence for determining response with the combined approach. CONCLUSION: Complete response to neoadjuvant chemoradiotherapy can be determined with excellent accuracy, substantial interobserver agreement and high level of confidence by combined interpretation of DWI and T2 high resolution MRI.				
100.	<p>Chandramohan, Jagan, Sigamani, Elanthenral, Abraham, Deepak Thomas, Jacob, Paul Mazhuvanchary, Cherian, Anish Jacob, Chandramohan, Anuradha, Mani, Thenmozhi and Manipadam, Marie Therese</p> <p>Intrathyroid Parathyroid Adenomas Uncommon Tumours at Unusual Sites: A Cross-sectional Study</p> <p>Journal of Clinical and Diagnostic Research. 2020 Aug, Vol-14(8): EC12-EC17</p> <p>PARTICULARS OF CONTRIBUTORS:</p> <ol style="list-style-type: none"> 1. Assistant Professor, Department of Pathology, Christian Medical College Hospital, Vellore, Tamil Nadu, India. 2. Associate Professor, Department of Pathology, Christian Medical College Hospital, Vellore, Tamil Nadu, India. 3. Professor, Department of Endocrine Surgery, Christian Medical College Hospital, Vellore, Tamil Nadu, India. 4. Professor, Department of Endocrine Surgery, Christian Medical College Hospital, Vellore, Tamil Nadu, India. 5. Associate Professor, Department of Endocrine Surgery, Christian Medical College Hospital, Vellore, Tamil Nadu, India. 6. Professor, Department of Radiodiagnosis, Christian Medical College Hospital, Vellore, Tamil Nadu, India. 7. Senior Demonstrator, Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India. 8. Professor, Department of Pathology, Christian Medical College Hospital, Vellore, Tamil Nadu, India. <p>Introduction: Ectopic Intrathyroid Parathyroid Adenomas (ITPAs) are rare and known to pose preoperative and intraoperative diagnostic challenges in localisation, resulting in failure of parathyroid surgery. The common histopathological features of these tumours are not elaborately described in literature. Aim: To describe the clinico-pathological features of ITPAs, identified among all parathyroid adenomas, diagnosed at a tertiary care hospital. Materials</p>	NAT	JUL TO DEC	Pathology, Endocrine Surgery, Radiodiagnosis, Biostatistics	PMC 8602

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>and Methods: This was a cross-sectional study of all ITPAs diagnosed between January 2012 to December 2019, at Christian Medical College and Hospital, Vellore, Tamil Nadu. The gross examination and microscopic findings of ITPAs were reviewed and tabulated. Clinical, radiological and intraoperative findings were compiled to obtain preoperative and intraoperative diagnostic rates. Results: Among 409 parathyroid adenomas, there were ten ITPAs (2.4%), with eight ectopic inferior (80%) and two ectopic superior parathyroids (20%). Four ITPAs were completely intrathyroid (0.97%). Histopathological features of ITPAs were those of usual parathyroid adenomas. Four patients (40%) had concomitant thyroid disease, including one papillary microcarcinoma (10%). Correct preoperative diagnostic rate was 40%. Intraoperative misjudgment of location occurred in two patients (20%). Conclusion: ITPAs are rare and correct preoperative and intraoperative diagnosis may not be always possible. Histopathological evaluation of suspicious intrathyroid nodules is necessary in such instances to correctly diagnose them.</p>				
101.	<p>Chandran, C. S., Narayanan, V., Chandran, S., Priyadarshini, P. and Karthik, R. Feasibility of Endoscopically Assisted Repair of Zygomatico-Maxillary Complex Orbital Fractures: Case Series J Maxillofac Oral Surg; 2020, 19 (3): 425-430 Address: Department of Oral and Maxillofacial Surgery, SRM Kattankulathur Dental College and Hospital, SRM University, Potheri, Kancheepuram Dt, Tamil Nadu 603 203 India. GRID: grid.473746.5 C/o Gen. Surgery Unit III, CMC, Vellore, Tamil Nadu 632004 India. GRID: grid.11586.3b. ISNI: 0000 0004 1767 8969 AIM: To assess the feasibility and the outcome of endoscopically assisted repair of zygomatico-maxillary complex orbital fractures in a tertiary care hospital. MATERIALS AND METHODS: A descriptive study was carried out over a period of 2 years (01. 11. 2014-31. 10. 2016). 0°-4 mm endoscopes were used for intra-operative endoscopic exploration. Regular armamentarium for management of maxillofacial trauma along with standard plating systems was used. Commercially available medical grade titanium meshes were utilised for orbital floor reconstruction. RESULTS: Fifty-seven of hundred and twelve surgically managed zygomatico-maxillary complex fractures required orbital exploration. Twenty-one of these had reconstruction of the orbital floor. Endoscopically assisted exploration was performed in 10 of the 21; trans-nasally in three cases, the Caldwell-Luc approach was used in three cases, and in another three, the existing fracture in the anterior wall of the maxilla was utilised. In addition, an endoscopic trans-nasal-sphenoidal approach was opted for to access the orbital apex to manage fractured bone fragments that were impinging on the optic nerve in one of the patients. CONCLUSION: Endoscopes serve as the primary tool in minimally invasive procedures. They are yet to evolve as a major role player in the maxillofacial arena. The authors conclude that endoscopes are truly beneficial as an adjunct to existing</p>	INT	JUL TO DEC	Gen. Surgery Unit III	<p>PMID: 32801539 PMC:7410979</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
102.	<p>techniques. They hold much promise for the future.</p> <p>Chaturvedi, P., Prabhash, K., Babu, G., Kuriakose, M., Birur, P., Anand, A. K., Kaushal, A., Mahajan, A., Syiemlieh, J., Singhal, M., Gairola, M., Ramachandra, P., Goyal, S., John, S., Nayyar, R., Patil, V. M., Rao, V. H., Roshan, V. and Rath, G. K.</p> <p>Indian clinical practice consensus guidelines for the management of oral cavity cancer</p> <p>Indian journal of cancer; 2020, 57 S6-S8</p> <p>Address: [Chaturvedi, Pankaj] Tata Mem Hosp, Dept Surg Oncol, Mumbai, Maharashtra, India. [Prabhash, Kumar] Tata Mem Hosp, Dept Med Oncol, Mumbai, Maharashtra, India. [Babu, Govind] Kidwai Mem Inst Oncol, Dept Med Oncol, Bangalore, Karnataka, India. [Kuriakose, Moni] Cochin Canc Res Ctr, Dept Surg Oncol, Cochin, Kerala, India. [Birur, Praveen] KLESIDS, Dept Oral Med & Radiol, Bangalore, Karnataka, India. [Anand, Anil K.] Max Super Special Hosp, Dept Radiat Oncol, New Delhi, India. [Kaushal, Ashish] HCG Canc Ctr, Dept Med Oncol, Ahmadabad, Gujarat, India. [Mahajan, Abhishek] Tata Mem Hosp, Dept Radiodiag & Imaging, Mumbai, Maharashtra, India. [Syiemlieh, Judita] Civil Hosp, Dept Radiat Oncol, Shillong, Meghalaya, India. [Singhal, Manish] Indraprastha Apollo Hosp, Dept Med Oncol, New Delhi, India. [Gairola, Munish] Rajiv Gandhi Canc Inst & Res Ctr, Dept Radiat Oncol, New Delhi, India. [Ramachandra, Prakash] Sri Shankara Canc Hosp & Res Ctr, Dept Radiat Oncol, Bangalore, Karnataka, India. [Goyal, Sumit] Rajiv Gandhi Canc Inst & Res Ctr, Dept Med Oncol, New Delhi, India. [John, Subashini] Christian Med Coll & Hosp, Dept Radiotherapy, Vellore, Tamil Nadu, India. [Nayyar, Rohit] Max Super Special Hosp, Dept Surg Oncol, New Delhi, India. [Rao, Vishal] HCG Canc Ctr, Dept Surg Oncol, Bangalore, Karnataka, India. [Roshan, Vikas] Shri Mata Vaishno Devi Narayana Superspecial Hosp, Dept Radiat Oncol, Jammu, Jammu & Kashmir, India. [Rath, G. K.] All India Inst Med Sci, Natl Canc Inst, Dept Radiat Oncol, Delhi, India.</p> <p>Prabhash, K (reprint author), Tata Mem Hosp, Dept Med Oncol, Mumbai, Maharashtra, India. kprabhash1@gmail.com</p>	NAT	JAN TO JUN	Radiotherapy	<p>WOS:000518668700002</p> <p>SCOPUS</p> <p>H-INDEX:36</p> <p>IF: 0.429 BIOXBIO (2018/2019)</p>
103.	<p>Chengappa, N., Rajkumar Honest, P. C., David, K., Pricilla, R. A., Rahman, S. M. and Rebecca, G.</p> <p>Effect of BATHE interview technique on patient satisfaction in an ambulatory family medicine centre in South India</p> <p>Fam Med Community Health; 2020, 8 (4): Address: Department of Family Medicine, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Department of Family Medicine, Christian Medical College, Vellore, Tamil Nadu, India prince.christopher@gmail.com.</p> <p>Department of Community Medicine, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>OBJECTIVE: The objective of the study is to determine the effect of background,</p>	INT	JUL TO DEC	Family Medicine, Community Medicine, Biostatistics	<p>PMID: 33060126</p> <p>PMC:7566425</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	affect, trouble, handling and empathy (BATHE) versus usual interview technique on patient satisfaction during regular consultation with family physicians in ambulatory care. DESIGN: The research design was a prospective, randomised control trial. SETTING: The trial took place in a family practice unit in South India, which was one of the clinical service units of the academic Department of Family Medicine of a tertiary hospital. PARTICIPANT: The eligible participants were adults above the age of 18 years, who did not have any acute presenting illness. The participants should have given consent and also not have any cognitive disability. A total of 138 participants took part in the trial, 70 in BATHE group and 68 in the non-BATHE group. All participants entering the trial completed the questionnaire. RESULT: The BATHE group had a significantly higher mean score for questions grouped under professional satisfaction. This included questions on whether the patient felt that the physician treated them as a person and also whether they felt the appropriate clinical examination was communicated to them. The questionnaire used for scoring satisfaction had 18 questions with a maximum possible score of 90. When taking a cut-off of 75% (68) from the total possible score of 90, 72.9% (51) of the participants for whom the BATHE consultation technique was used were satisfied as compared with only 55.9% (30) for whom the routine consultation was carried out. This was statistically significant ($\chi^2=11.15$, p value=0.0006) CONCLUSION: The study suggests that using BATHE in this family practice centre is beneficial in improving the perception of person centeredness in the consultation. However, further studies ruling out all possible bias are needed in our setting before the range of probable benefits of the BATHE technique can be fully gauged.				
104.	Cherian, K. E., Kapoor, N. and Paul, T. V. Paget's Disease of Bone Revisited: The Changing Indian Scenario Indian J Endocrinol Metab; 2020, 24 (4): 293-294 Address: Department of Endocrinology, Diabetes and Metabolism, Christian Medical College and Hospital, Vellore , Tamil Nadu, India.	NAT	JUL TO DEC	Endocrinology, Diabetes and Metabolism	PMID: 33088749 PMC:7540821
105.	Cherian, K. E., Kapoor, N. and Paul, T. V. Commentary on Indian Menopause Society Guidelines J Midlife Health; 2020, 11 (2): 115-116 Address: Department of Endocrinology, Christian Medical College, Vellore , Tamil Nadu, India. Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore , Tamil Nadu, India. Department of Endocrinology, Diabetes and Metabolism, Christian Medical College and Hospital, Vellore , Tamil Nadu, India.	NAT	JUL TO DEC	Endocrinology	PMID:33281421 PMC ID:7688021
106.	Cherian, K. E., Kapoor, N., Devasia, A. J., Mathews, V., Srivastava, A., Thomas, N., George, B. and Paul, T. V. Do Bone Density, Bone Microarchitecture, and Body Composition Differ in Recipients of Allogeneic Hematopoietic Stem Cell Transplant? A Cross-Sectional Study from Southern India	NAT	JAN TO JUN	Endocrinology, Clinical Haematology	WOS:000517669200015 SCOPUS H-INDEX:15 IF: 0.869 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Biology of Blood and Marrow Transplantation; 2020, 26 (3): 540-545</p> <p>Address: [Cherian, Kripa Elizabeth; Kapoor, Nitin; Thomas, Nihal; Paul, Thomas V.] Christian Med Coll & Hosp, Dept Endocrinol, Vellore, Tamil Nadu, India. [Devasia, Antic J.; Mathews, Vikram; Srivastava, Alok; George, Biju] Christian Med Coll & Hosp, Dept Clin Hematol, Vellore, Tamil Nadu, India. Paul, TV (reprint author), Christian Med Coll & Hosp, Dept Endocrinol & Metab, Vellore 632004, Tamil Nadu, India. thomasvpaul@yahoo.com</p> <p>The significant advancements made in the field of allogeneic hematopoietic stem cell transplantation (allo-HSCT) have ensured increased longevity in transplant recipients. However, they do have late effects that may adversely affect the endocrine system, bone health, and body composition. This study was undertaken to evaluate bone mineral density (BMD), trabecular bone score, and body composition in recipients of allo-HSCT and compare them with age, sex, and body mass index (BMI) matched controls. This was a cross-sectional study done in 63 cases and 65 matched controls. The mean femoral neck BMD was found to be lower in cases than in controls (0.777 [0.119] versus 0.846 [0.122] g/cm², P = .002). Among cases, the mean BMD at the neck of femur was lower in patients who had received myeloablative conditioning compared with those who had received the nonmyeloablative regimen (0.731 [0.090] versus 0.802 [0.126] g/cm², P = .014). The mean (SD) bone density at the lumbar spine was significantly lower in the group that had received total body irradiation compared with the group that did not (0.930 10.1111 versus 0.993 [0.127], P = .044). Trabecular bone score did not differ between cases and controls (1.383 [0.877] versus 1.389 [0.750], P = .670). The lean mass was significantly lower (15.9 [2.4] versus 18.6 [4.8] kg/m², P < .001) and the prevalence of sarcopenia (42% versus 11%, P < .001) significantly higher in cases than in controls. Normal-weight obesity was also noted to be higher among those with sarcopenia than in those without (12/26 versus 5/36; P = .009). The procedure of allo-HSCT may thus cause an impairment of bone health and alterations in body composition well after the cure of the primary disease. (C) 2019 American Society for Transplantation and Cellular Therapy. Published by Elsevier Inc.</p>				
107.	<p>Cherian, K. E., Kapoor, N., Devasia, A. J., Mathews, V., Srivastava, A., Thomas, N., George, B. and Paul, T. V. Endocrine Challenges and Metabolic Profile in Recipients of Allogeneic Haematopoietic Stem Cell Transplant: A Cross-Sectional Study from Southern India Indian Journal of Hematology and Blood Transfusion; 2020, 36 (3): 484-490</p> <p>Address: Department of Endocrinology, Christian Medical College and Hospital, Vellore, India Department of Clinical Haematology, Christian Medical College and Hospital,</p>	INT	JAN TO JUN	Endocrinology, Clinical Haematology	<p>PMID: 32647422 PMC:7326866 SCOPUS H-INDEX:114 IF: 3.599 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Vellore, India</p> <p>Although haematopoietic stem cell transplant has been successfully employed in the cure of several malignant and non-malignant conditions, survivors often suffer from delayed effects involving the endocrine system and cardio-metabolic risk factors. In this cross-sectional study, we aimed to assess the prevalence of endocrine dysfunction and alterations in metabolic profile in 63 recipients of allogeneic stem cell transplantation as compared to 65 age, sex and body mass index matched controls. Hypogonadism emerged as the most prevalent endocrinopathy, present in 23/60 (38.3%) of subjects, followed by overt and subclinical hypothyroidism in 10/63 (15.9%) of cases. The metabolic parameters, that included plasma glucose and lipid profile were not significantly different between cases and controls. However, insulin resistance, as assessed by surrogate markers employing HOMA IR (3.82 vs. 1.97) and QUICKI (0.338 vs. 0.373) was significantly higher among cases than in controls (P < 0.05). Abnormal glucose tolerance was observed in about one-third of the study cohort. The prevalence of overt diabetes (7%) was similar to that in the general population across India (8%); the prevalence of pre-diabetes (21%) was however considerably higher than the national average of 10%. Thus, although the process of haematopoietic stem cell transplant is often curative for the primary haematological disease, it may be associated with various delayed effects on the endocrine system and metabolic profile. Therefore, it is imperative that recipients be screened for the potential development of these late effects subsequent to the transplantation procedure. © 2019, Indian Society of Hematology and Blood Transfusion.</p>				
108.	<p>Cheriyian, A. and Kumar, S. Impact of COVID-19 on urology residency in India - Results of a nationwide survey Indian J Urol; 2020, 36 (4): 243-245 Address: Department of Urology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India.</p>	NAT	JUL TO DEC	Urology	<p>PMID: 33376257 PMC:7759180</p>
109.	<p>Cheriyian, A., George, A. J. P., Devasia, A. and Chandrasingh, J. Can rectal catheters be avoided during paediatric urodynamic studies? Arab Journal of Urology; 2020, 18 (1): 41-46 Address: Department of Urology, Christian Medical College and Hospital, Vellore, India</p> <p>Objective: To determine if the interpretation of urodynamic studies (UDS) in children without a rectal catheter may be similar to multi-channel studies, as UDS in children are challenging and can sometimes be difficult to interpret. Patients and methods: In this retrospective pilot study, 115 paediatric pressure-flow studies were included. A blinded investigator was given two sets of UDS traces. The first set had the vesical trace of all children and the second set had the multi-channel trace. The agreement between the interpretations of both the sets was tested by</p>	INT	JAN TO JUN	Urology	<p>SCOPUS H-INDEX:15 IF: 0.13 RG (2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Cohen's κ, and sensitivity, specificity, and predictive values were expressed with 95% confidence intervals (CIs). The voiding pattern was compared and Pearson's correlation coefficient was used to analyse the pressure at maximum urinary flow (Qmax). Results: The most common indications for UDS were neurogenic bladder and posterior urethral valves. The interpretation of compliance and detrusor overactivity by single-channel analysis had a positive predictive value of 92.1% (95% CI 84.7–96.1%) and 89.4% (95% CI 78.3–95.6%), respectively, and a negative predictive value of 100% and 97.1% (95% CI 89.5–99.2%) respectively, in comparison to multi-channel analysis. Children with underactive detrusor were identified reliably by analysing the straining pressure pattern and flow curve. Amongst children who voided, the pressure at Qmax showed a moderate correlation (Pearson's coefficient = 0.53) between the two groups. Conclusion: Rectal catheters may be avoided in a carefully selected group of children undergoing UDS who only need filling phase assessment. Abbreviations: DO: detrusor overactivity; EBC: expected bladder capacity; Pabd: abdominal pressure; Pdet: detrusor pressure; PUV: posterior urethral valve; (N)(P)PV: (negative) (positive) predictive value; Pves: vesical pressure; Qmax: maximum urinary flow rate; UDS: urodynamic studies; UI: urinary incontinence. © 2019, © 2019 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.</p>				
110.	<p>Chesnut, R., Aguilera, S., Buki, A., Bulger, E., Citerio, G., Cooper, D. J., Arrastia, R. D., Diringer, M., Figaji, A., Gao, G. Y., Geocadin, R., Ghajar, J., Harris, O., Hoffer, A., Hutchinson, P., Joseph, M., Kitagawa, R., Manley, G., Mayer, S., Menon, D. K., Meyfroidt, G., Michael, D. B., Oddo, M., Okonkwo, D., Patel, M., Robertson, C., Rosenfeld, J. V., Rubiano, A. M., Sahuquillo, J., Servadei, F., Shutter, L., Stein, D., Stocchetti, N., Taccone, F. S., Timmons, S., Tsai, E., Ullman, J. S., Vespa, P., Videtta, W., Wright, D. W., Zammit, C. and Hawryluk, G. W. J.</p> <p>A management algorithm for adult patients with both brain oxygen and intracranial pressure monitoring: the Seattle International Severe Traumatic Brain Injury Consensus Conference (SIBICC)</p> <p>Intensive Care Medicine; 2020, 46 (5): 919-929</p> <p>Address: [Chesnut, Randall] Univ Washington, Harborview Med Ctr, Dept Neurol Surg, 325 Ninth Ave, Mailstop 359766, Seattle, WA 98109 USA. [Chesnut, Randall] Univ Washington, Harborview Med Ctr, Dept Orthopaed Surg, 325 Ninth Ave, Mailstop 359766, Seattle, WA 98109 USA. [Aguilera, Sergio] Almirante Nef Naval Hosp, Vina Del Mar, Chile. [Aguilera, Sergio] Univ Valparaiso, Valparaiso, Chile. [Buki, Andras] Sch Med, Dept Neurosurg, Ifjusag Utja 20, H-7624 Pecs, Hungary. [Buki, Andras] Szentagotai Res Ctr, Ifjusag Utja 20, H-7624 Pecs, Hungary. [Buki, Andras] Univ Pecs, Pecs, Hungary. [Bulger, Eileen] Univ Washington, Harborview Med Ctr, Dept Surg, 325 Ninth Ave, Seattle, WA 98104 USA. [Citerio, Giuseppe] Univ Milano Bicocca, Sch Med & Surg, Milan, Italy. [Citerio, Giuseppe] San Gerardo Hosp, ASST, Dept Emergency & Intens Care, Neurointens Care, Monza, Italy. [Cooper, D. Jamie] Monash Univ, Australian & New Zealand Intens Care Res Ctr, Intens Care</p>	INT	JAN TO JUN	Neurological Sciences	<p>WOS:000531156300006 SCOPUS H-INDEX:187 IF: 18.967 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Pittsburgh, Med Ctr, 3550 Terrace St,Room 646, Pittsburgh, PA 15261 USA. [Stein, Deborah] Univ Calif San Francisco, Zuckerberg San Francisco Gen Hosp, 1001 Potrero Ave,Ward 3A, San Francisco, CA 94110 USA. [Stein, Deborah] Univ Calif San Francisco, Ctr Trauma, 1001 Potrero Ave,Ward 3A, San Francisco, CA 94110 USA. [Stocchetti, Nino] Milan Univ, Dept Physiopathol & Transplantat, Milan, Italy. [Stocchetti, Nino] Osped Maggiore Policlin, Fdn IRCCS Ca Granda, Neurosci Intens Care Unit, Milan, Italy. [Taccone, Fabio Silvio] Univ Libre Bruxelles ULB, Erasme Hosp, Dept Intens Care, Brussels, Belgium. [Timmons, Shelly] Penn State Univ, Milton S Hershey Med Ctr, Dept Neurol Surg, 30 Hope Dr,Suite 1200,Bldg B, Hershey, PA 17033 USA. [Tsai, Eve] Univ Ottawa, Suruchi Bhargava Chair Spinal Cord & Brain Regene, Ottawa Hosp, Neurosci Unit C2, Civ Campus,1053 Carling Ave, Ottawa, ON K1Y 4E9, Canada. [Ullman, Jamie S.] Shore Univ Hosp, Donald & Barbara Zucker Sch Med Hofstra Northwell, Dept Neurosurg, 300 Community Dr,9 Tower, Manhasset, NY USA. [Vespa, Paul] UCLA Med Ctr, Ronald Reagan UCLA Med Ctr, Santa Monica, CA USA. [Videtta, Walter] Posadas Hosp, Buenos Aires, DF, Argentina. [Wright, David W.] Emory Univ, Sch Med, 49 Jesse Hill Jr Dr, Atlanta, GA 30303 USA. [Zammit, Christopher] Univ Rochester, Med Ctr, Sch Med & Dent, 601 Elmwood Ave,Box 655C, Rochester, NY 14642 USA. [Hawryluk, Gregory W. J.] Univ Manitoba, Neurosurg Sect, GB1,820 Sherbrook St, Winnipeg, MB R3A 1R9, Canada. Hawryluk, GWJ (reprint author), Univ Manitoba, Neurosurg Sect, GB1,820 Sherbrook St, Winnipeg, MB R3A 1R9, Canada. ghawryluk@hsc.mb.ca</p> <p>Background Current guidelines for the treatment of adult severe traumatic brain injury (sTBI) consist of high-quality evidence reports, but they are no longer accompanied by management protocols, as these require expert opinion to bridge the gap between published evidence and patient care. We aimed to establish a modern sTBI protocol for adult patients with both intracranial pressure (ICP) and brain oxygen monitors in place. Methods Our consensus working group consisted of 42 experienced and actively practicing sTBI opinion leaders from six continents. Having previously established a protocol for the treatment of patients with ICP monitoring alone, we addressed patients who have a brain oxygen monitor in addition to an ICP monitor. The management protocols were developed through a Delphi-method-based consensus approach and were finalized at an in-person meeting. Results We established three distinct treatment protocols, each with three tiers whereby higher tiers involve therapies with higher risk. One protocol addresses the management of ICP elevation when brain oxygenation is normal. A second addresses management of brain hypoxia with normal ICP. The third protocol addresses the situation when both intracranial hypertension and brain hypoxia are present. The panel considered issues pertaining to blood transfusion and ventilator management when designing the different algorithms. Conclusions These protocols are intended to assist clinicians in the management of patients with both ICP and brain oxygen monitors but they do not reflect either a standard-of-care or a substitute for thoughtful individualized management. These protocols</p>				

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	should be used in conjunction with recommendations for basic care, management of critical neuroworsening and weaning treatment recently published in conjunction with the Seattle International Brain Injury Consensus Conference.				
111.	<p>Chinta, P., Rebekah, G., A, T. Kunjummen and M, S. Kamath Revisiting the role of serum progesterone as a test of ovulation in eumenorrheic subfertile women: a prospective diagnostic accuracy study Fertil Steril; 2020, 114 (6): 1315-1321 Address: Department of Reproductive Medicine, Christian Medical College Hospital, Vellore, India. Department of Biostatistics, Christian Medical College Hospital, Vellore, India. Department of Reproductive Medicine, Christian Medical College Hospital, Vellore, India. Electronic Address: dockamz@gmail.com.</p> <p>OBJECTIVE: To estimate the prevalence of ovulatory cycles in eumenorrheic subfertile women and compare the diagnostic accuracy of a single ultrasound with serum midluteal progesterone measurement in detecting ovulatory cycles. DESIGN: Prospective diagnostic accuracy study. SETTING: University-level hospital. PATIENT(S): A total of 208 subfertile eumenorrheic women. INTERVENTION(S): None. MAIN OUTCOME MEASURE(S): To estimate the prevalence of ovulatory cycles in eumenorrheic women and compare the diagnostic accuracy of a single, well-timed ultrasound scan (index test) with serum progesterone measurement (reference test) by calculating the sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV), and positive likelihood ratio (LR+) and negative likelihood ratio (LR-). RESULT(S): The prevalence of ovulatory cycles among subfertile eumenorrheic women was 92.9% and 99.5% when midluteal serum progesterone level and ultrasound scanning were used as the reference test, respectively. The sensitivity, specificity, PPV, and NPV of ultrasound in identifying ovulatory cycles were 100%, 7.1%, 93.4%, and 100%, respectively. The LR+ and LR- were 1.1 and 0, respectively. The agreement between the ultrasound and serum progesterone was almost perfect (prevalence and bias-adjusted kappa = 0.81. CONCLUSION(S): The prevalence of ovulatory cycles in eumenorrheic subfertile women appears to be high. A single well-timed ultrasound can be performed to identify ovulatory cycles during the infertility workup in eumenorrheic women.</p>	INT	JUL TO DEC	Reproductive Medicine, Biostatistics	PMID: 32943223 WOS:000598345800020
112.	<p>Chiramel, M. J., Sathishkumar, D., Edison, E. S. and George, R. Two cases of CARD14-associated papulosquamous eruption from India Pediatr Dermatol; 2020, 37 (4): 692-694</p> <p>Address: [Chiramel, Minu Jose; Sathishkumar, Dharshini; George, Renu] Christian Med Coll Vellore, Dept Dermatol, Vellore, Tamil Nadu, India. [Edison, Eunice Sindhuvi] Christian Med Coll Vellore, Dept Haematol, Vellore, Tamil Nadu, India. George, R (reprint author), Med Coll Vellore, Dept Dermatol, Vellore 632004, Tamil Nadu, India. renuegeorge@gmail.com</p>	INT	JAN TO JUN	Dermatology, Clinical Haematology	PMID:32323375 WOS:000527737600001 SCOPUS H-INDEX:71 IF: 1.178 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Identification of CARD14-associated papulosquamous eruption (CAPE) is important as it helps in determining prognosis and management of those affected. We report two siblings with genetically confirmed CAPE presenting with treatment-resistant erythroderma in one patient and patterned psoriatic plaques with facial predominance in the other.				
113.	Christopher, D. J., Isaac, B. T. and Thangakunam, B. Preparedness to face the COVID-19 pandemic - is India missing the mark? Journal of global health; 2020, 10 (2): 020338 Address: Department of Pulmonary Medicine, Christian Medical College, Vellore , India. (Available upon request from the corresponding author), and declare no conflicts of interest.	INT	JUL TO DEC	Pulmonary Medicine	PMID: 33214883 PMC:7648878 WOS:000612476300053
114.	Christopher, D. J., Isaac, B. T., Rupali, P. and Thangakunam, B. Health-care preparedness and health-care worker protection in COVID-19 pandemic Lung India; 2020, 37 (3): 238-245 Address: Department of Pulmonary Medicine, Christian Medical College, Vellore , Tamil Nadu, India. Department of Infectious Diseases, Christian Medical College, Vellore , Tamil Nadu, India. The COVID-19 pandemic has ravaged the nations and has created the institution of unprecedented measures globally toward its containment. Extraordinary measures may be needed for health-care preparedness, to reduce morbidity and mortality. Health-care workers who are at the frontlines in such pandemics are the most vulnerable. These issues are addressed in this article.	INT	JAN TO JUN	Pulmonary Medicine, Infectious Diseases	PMID:32367846 SCOPUS H-INDEX:56 IF: 2.503 BIOXBIO (2018/2019)
115.	Christopher, D. J., Jeyaseelan, L., Michael, J. S., Veeraraghavan, B., Manipaydam, M. T., David, T., Gupta, M. and Yadav, B. Burden of diabetes among patients with tuberculosis: 10-year experience from a tertiary care referral teaching hospital in South India Lung India; 2020, 37 (3): 232-237 Address: Department of Pulmonary Medicine, Christian Medical College, Vellore , Tamil Nadu, India. Department of Biosatistics, Christian Medical College, Vellore , Tamil Nadu, India. Department of Clinical Microbiology, Christian Medical College, Vellore , Tamil Nadu, India. Department of Pathology, Christian Medical College, Vellore , Tamil Nadu, India. Department of Medicine, Christian Medical College, Vellore , Tamil Nadu, India. CONTEXT: Tuberculosis (TB) and diabetes mellitus (DM) are converging	NAT	JAN TO JUN	Pulmonary Medicine, Biostatistics, Clinical Microbiology, Pathology, Medicine	PMID:32367845 SCOPUS H-INDEX:22 IF: 2.231 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>epidemics, each worsening the morbidity of the other. A study of the prevalence of DM in TB patients assumes great importance. AIMS: The study aims to evaluate the association between DM and TB over a 10-year period in a tertiary care hospital. SETTINGS AND DESIGN: A retrospective observational study in a southern Indian tertiary care teaching hospital was conducted. MATERIALS AND METHODS: All patients with TB diagnosed and treated during the 10-year study period were identified from the hospital database. All relevant clinical, microbiological, and laboratory results pertaining to diagnosis of DM were collected. The diagnosis of TB and DM was made as per the standard criteria. STATISTICAL ANALYSIS: Categorical variables were analyzed using Chi-square test while continuous variables using independent sample t-test. RESULTS: From 2001 to 2012, we studied 1979 TB patients among whom data on DM were available. The prevalence of DM was 29%, 21%, and 14%, in smear positive, smear negative and extrapulmonary TB respectively (overall 24%). Diabetics were more likely to be men (77.3% vs. 61%;P = 0.001); >40 years of age (81.7% vs. 38.9%;P < 0.001); heavier (59.96 vs. 50.37;P = 0.004); tobacco smokers (16.1% vs. 8.1%;P < 0.001); and alcohol consumers (6.8% vs. 4%;P = 0.02). They were less likely to be HIV coinfecting (1.8% vs. 6.1%;P < 0.001). HIV coinfection was seen in 5% of patients and was substantially higher in extrapulmonary TB group (19.4%). Multidrug-resistant TB was lower in DM (11.7%) compared to non-DM (15.9%) (P = 0.02). Overall, 48% of the DM patients were diagnosed at the time of TB diagnosis. Over 10 years, no obvious changes in the trend were evident. CONCLUSIONS: Over a 10-year study period, 24% of the TB patients were diabetic, nearly half were detected at the time of TB diagnosis. There may be a good case for screening all TB patients for DM.</p>				
116.	<p>Christopher, D. J., Oommen, A. M., George, K., Shankar, D., Agrawal, A. and Thangakunam, B. Prevalence of Airflow Obstruction as Measured by Spirometry, in Rural Southern Indian Adults COPD-Journal of Chronic Obstructive Pulmonary Disease; 2020, 17 (2): 128-135</p> <p>Address: [Christopher, Devasahayam J.; Shankar, Deepa; Thangakunam, Balamugesh] Christian Med Coll & Hosp, Dept Pulm Med, Vellore, Tamil Nadu, India. [Oommen, Anu Mary; George, Kuryan] Christian Med Coll & Hosp, Dept Community Hlth, Vellore 632002, Tamil Nadu, India. [Agrawal, Anurag] CSIR, Inst Genom & Integrat Biol, New Delhi, India. Oommen, AM (reprint author), Christian Med Coll & Hosp, Dept Community Hlth, Vellore 632002, Tamil Nadu, India. anuoommen@cmcvellore.ac.in</p> <p>Rural population-based estimates of airflow obstruction based on spirometry are unavailable from southern India. This study assessed the prevalence of spirometry-defined airflow obstruction in Vellore, Tamil Nadu. A cross sectional survey was</p>	NAT	JAN TO JUN	Pulmonary Medicine, Community Health	WOS:000512865000001 H-INDEX:22 IF: 2.231 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	done in nine villages, among adults aged ≥ 30 years, where previous cardiovascular surveys had been conducted (1994, 2011). Population proportional to size sampling was used to select 20 clusters, with sampling from all streets proportional to the number of households. One person randomly selected per household was interviewed for symptoms and risk factors. A respiratory therapist performed pre and post bronchodilator spirometry on all, following American Thoracic Society criteria. Airflow obstruction was defined as pre-bronchodilator Forced Expiratory Volume 1 s/Forced Vital Capacity (FEV1/FVC) < Lower Limit of Normal (LLN, derived from local prediction equations) and compared to other criteria. Of 1015 participants, 787 completed technically acceptable spirometry. The prevalence of airflow obstruction was 9.0% (95% CI: 5.8%-9.6%, 71). Fixed obstruction (post bronchodilator FEV1/FVC < LLN) was 4.6% (95% CI: 3.1%-6.1%, 36), and 4.1% (95% CI: 2.7%-5.5%, 32) using post bronchodilator FEV1/FVC < 70%. The GOLD criteria missed 56% (40) of those with airflow obstruction, of which 87.5% were females. Although 63.4% with airflow obstruction had moderate to severe disease, 82.2% were not on treatment and only 48.9% reported symptoms in the previous year. This study estimates prevalence of airflow obstruction based on spirometry in rural southern India. Despite significant impairment on spirometry, majority were undiagnosed, and half did not report symptoms.				
117.	Christopher, D. J., Roy, D., Shankar, D. and Thangakunam, B. Advance lung function testing: Lung Volumes(TLC) & Diffusing Capacity(DLco) diagnoses substantial pulmonary function impairment in treated Pulmonary Tuberculosis patients European Respiratory Journal; 2020, 56 Address: [Christopher, Devasahayam Jesudas; Roy, Dhivya; Shankar, Deepa; Thangakunam, Balamugesh] Christian Med Coll & Hosp, Vellore , Tamil Nadu, India. djchris@cmcvellore.ac.in	INT	JUL TO DEC	Respiratory Medicine	WOS:000606501402411
118.	Christopher, D. J., Shankar, D., Victor, C., Simon, E. and Thangakunam, B. Incremental Yield of Xpert MTB/RIF Ultra over Xpert MTB/RIF in the diagnosis of extra-pulmonary tuberculosis European Respiratory Journal; 2020, 56 Address: [Christopher, Devasahayam Jesudas] Christian Med Coll & Hosp, Vellore , Tamil Nadu, India. djchris@cmcvellore.ac.in	INT	JUL TO DEC	Respiratory Medicine	WOS:000606501403038
119.	Clark, D., Joannides, A., Ibrahim Abdallah, O., Olufemi Adeleye, A., Hafid Bajamal, A., Bashford, T., Bhebhe, A., Biluts, H., Budohoska, N., Budohoski, K., Cherian, I., Marklund, N., Fernandez Mendez, R., Figaji, T., Kumar Gupta, D., Iaccarino, C., Ilunga, A., Joseph, M., Khan, T., Laeke, T., Waran, V., Park, K., Rosseau, G., Rubiano, A., Saleh, Y., Shabani, H. K., Smith, B., Sichizya, K., Tewari, M., Tirsit, A., Thu, M., Tripathi, M., Trivedi, R., Villar, S., Devi Bhagavatula, I., Servadei, F., Menon, D., Koliass, A. and Hutchinson, P. Management and outcomes following emergency surgery for traumatic brain	INT	JAN TO JUN	Neurological Sciences	SCOPUS H-INDEX:3 IF: 0.170 RG (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>injury - A multi-centre, international, prospective cohort study (the Global Neurotrauma Outcomes Study) International Journal of Surgery Protocols; 2020, 20 1-7</p> <p>Address: National Institute of Health Research Global Health Research Group on Neurotrauma, University of Cambridge, Cambridge, CB2 0QQ, United Kingdom University Teaching Hospital, Lusaka, Zambia Sohag University Hospitals, Sohag, Egypt University College Hospital Ibadan, Ibadan, Oyo, Nigeria Dr Soetomo Hospital, Surabaya, Jawa Timur, Indonesia University of Cambridge, Cambridge, Cambridgeshire, United Kingdom Neurosurgery Unit, Surgery Department, Addis Ababa University, College of Health Sciences, Addis Ababa, Oromia, Ethiopia Nobel Medical College Teaching Hospital P Ltd, Biratnagar, Morang, Nepal Lund University, Skane University Hospital, Lund, Sweden University of Cape Town, Rondebosch, Western Cape, South Africa All India Institute of Medical Sciences, New Delhi, Delhi, India University Hospital of Parma, Parma, Emilia-Romagna, Italy Christian Medical College Vellore Association, Vellore, Tamil Nadu, India North West General Hospital & Research Center, Peshawar, Khyber Pakhtunkhwa, Pakistan University of Malaya Medical Centre, Kuala Lumpur, Wilayah Persekutuan, Malaysia Harvard Medical School, Boston, MA, United States George Washington University School of Medicine and Health Sciences, Washington, DC, United States Universidad El Bosque, Department of Neurosurgery, Bogota, Colombia University of Oxford, Oxford, Oxfordshire, United Kingdom Muhimbili Orthopaedic Institute and Muhimbili University College of Allied Health Sciences, Dar es Salaam, Tanzania Post Graduate Institute of Medical Education and Research Chandigarh, Chandigarh, India Tikur Anbessa Specialized Hospital, Addis Ababa University, Addis Ababa, Oromia, Ethiopia Yangon General Hospital, Yangon, Yangon Region, Myanmar MRC Biostatistics Unit, Cambridge, Cambridgeshire, United Kingdom National Institute of Mental Health & Neuro Science, Bangalore, India Humanitas University and Research Hospital, Department of Neurosurgery, Milan, Italy</p> <p>Introduction: Traumatic brain injury (TBI) accounts for a significant amount of death and disability worldwide and the majority of this burden affects individuals in low-and-middle income countries. Despite this, considerable geographical differences have been reported in the care of TBI patients. On this background, we</p>				

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	aim to provide a comprehensive international picture of the epidemiological characteristics, management and outcomes of patients undergoing emergency surgery for traumatic brain injury (TBI) worldwide. Methods and analysis: The Global Neurotrauma Outcomes Study (GNOS) is a multi-centre, international, prospective observational cohort study. Any unit performing emergency surgery for TBI worldwide will be eligible to participate. All TBI patients who receive emergency surgery in any given consecutive 30-day period beginning between 1st of November 2018 and 31st of December 2019 in a given participating unit will be included. Data will be collected via a secure online platform in anonymised form. The primary outcome measures for the study will be 14-day mortality (or survival to hospital discharge, whichever comes first). Final day of data collection for the primary outcome measure is February 13th. Secondary outcome measures include return to theatre and surgical site infection. Ethics and dissemination: This project will not affect clinical practice and has been classified as clinical audit following research ethics review. Access to source data will be made available to collaborators through national or international anonymised datasets on request and after review of the scientific validity of the proposed analysis by the central study team. © 2020 The Authors				
120.	Coelho, V. V., Surendran, S., Roopavathana, B. and Chase, S. Colonic inflammatory myofibroblastic tumour presenting as 'pyrexia of unknown origin': report of a rare disease and its unique presentation BMJ case reports; 2020, 13 (12); Address: General Surgery, Christian Medical College and Hospital, Vellore , Tamil Nadu, India. General and Upper Gastrointestinal Surgery, Christian Medical College and Hospital, Vellore , Tamil Nadu, India suraj.cmc@cmcvellore.ac.in. General Surgery Unit IV, Christian Medical College and Hospital, Vellore , Tamil Nadu, India. An intra-abdominal inflammatory myofibroblastic tumour (IMT) belongs to a rare group of diseases initially described as an inflammatory pseudotumour. Even though it is seen more often in children, its incidence in adults is even rarer. Clinical presentations can vary depending on its site and inherent tumour properties. The colon is an uncommon site for IMT and pyrexia of unknown origin (PUO) as its dominant clinical presentation is even rarer. A 27-year-old woman presented with PUO. She was evaluated under the department of internal medicine before undergoing an 18F-fluorodeoxyglucose positron emission tomography-computed tomography scan. This showed an intensely enhancing descending colon mass. An image-guided biopsy of this lesion was reported as IMT. She underwent a left hemicolectomy and complete excision of the tumour, following which her symptoms resolved completely. The patient has been disease-free at a 6-month follow-up and is asymptomatic at 1 year.	INT	JUL TO DEC	General and Upper Gastrointestinal Surgery, General Surgery Unit IV	PMID: 33298475 PMC:7733118
121.	Coffeng, L. E., Malizia, V., Vegvari, C., Cools, P., Halliday, K. E., Levecke, B., Mekonnen, Z., Gichuki, P. M., Sayasone, S., Sarkar, R., Shaali, A., Vlamincck, J., Anderson, R. M. and De Vlas, S. J.	INT	JAN TO JUN	Gastrointestinal Sciences	SCOPUS H-INDEX:241 IF: 5.045 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Impact of Different Sampling Schemes for Decision Making in Soil-Transmitted Helminthiasis Control Programs The Journal of infectious diseases; 2020, 221 (5): S531-S538</p> <p>Address: Department of Public Health, Erasmus MC, University Medical Center Rotterdam, Rotterdam, Netherlands London Centre for Neglected Tropical Disease Research, Department of Infectious Disease Epidemiology, Imperial College London, London, United Kingdom Department of Virology, Parasitology and Immunology, Faculty of Veterinary Medicine, Ghent University, Belgium Faculty of Infectious and Tropical Diseases, London School of Hygiene & Tropical Medicine, London, United Kingdom Jimma University Institute of Health, Jimma University, Jimma, Ethiopia Eastern and Southern Africa Centre of International Parasite Control, Kenya Medical Research Institute, Nairobi, Kenya Lao Tropical and Public Health Institute, Ministry of Health Vientiane, Laos Division of Gastrointestinal Sciences, Christian Medical College, Vellore, Tamil Nadu, India Laboratory Division, Public Health Laboratory-Ivo de Carneri, United Republic of Tanzania, Chake Chake</p> <p>Starting and stopping preventive chemotherapy (PC) for soil-transmitted helminthiasis is typically based on the prevalence of infection as measured by Kato-Katz (KK) fecal smears. Kato-Katz-based egg counts can vary highly over repeated stool samples and smears. Consequentially, the sensitivity of KK-based surveys depends on the number of stool samples per person and the number of smears per sample. Given finite resources, collecting multiple samples and/or smears means screening fewer individuals, thereby lowering the statistical precision of prevalence estimates. Using population-level data from various epidemiological settings, we assessed the performance of different sampling schemes executed within the confines of the same budget. We recommend the use of single-slide KK for determining prevalence of moderate-to-heavy intensity infection and policy decisions for starting and continuing PC; more sensitive sampling schemes may be required for policy decisions involving stopping PC. Our findings highlight that guidelines should include specific guidance on sampling schemes. © The Author(s) 2019. Published by Oxford University Press for the Infectious Diseases Society of America.</p>				
122.	<p>Collins, E. M., Tam, P. I., Trehan, I., Cartledge, P., Bose, A., Lanaspas, M., Kidd, P. and Bassat, Q. Strengthening Health Systems and Improving the Capacity of Pediatric Care Centers to Respond to Epidemics Such as COVID-19 in Resource-limited Settings J Trop Pediatr; 2020, 66 (4): 357-365</p>	Int	JAN TO JUN	Paediatrics	<p>PMID:32407490 PMC ID: PMC7239159 WOS:000608142700001</p> <p>H-INDEX:50 IF: 1.289 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Address: Duke University School of Medicine, Department of Pediatrics, Division of Neonatology- Special Infant Complex Care, Durham, NC, USA. Head, Paediatrics and Child Health Research Group, Malawi-Liverpool Wellcome Trust Clinical Research Programme, Blantyre, Malawi. Consultant Paediatrician, University of Malawi College of Medicine, Blantyre, Malawi. Senior Clinical Lecturer, Liverpool School of Tropical Medicine, Liverpool, England, United Kingdom. Associate Professor of Pediatrics, University of Washington, Seattle, WA, USA. Adjunct Associate Professor of Global Health, University of Washington, Seattle, WA, USA. Paediatrician, Leeds Community NHS Care Trust, United Kingdom. Professor of Paediatrics, Christian Medical College, Vellore, India. Pediatrics Department, Hospital Sant Joan de Déu (University of Barcelona), Barcelona, Spain. Health Sciences Publisher, Oxford University Press, Oxford, United Kingdom. ISGlobal, Hospital Clínic - Universitat de Barcelona, Barcelona, Spain. Centro de Investigação em Saúde de Manhiça (CISM), Maputo, Mozambique. ICREA research Professor, ICREA, Barcelona, Spain. Consorcio de Investigación Biomédica en Red de Epidemiología y Salud Pública (CIBERESP), Madrid, Spain.</p>				
123.	<p>Colston, J., Olortegui, M. P., Zaitchik, B., Yori, P. P., Kang, G., Ahmed, T., Bessong, P., Mduma, E., Bhutta, Z., Shrestha, P. S., Lima, A. and Kosek, M. Pathogen-Specific Impacts of the 2011-2012 La Nina-Associated Floods on Enteric Infections in the MAL-ED Peru Cohort: A Comparative Interrupted Time Series Analysis International Journal of Environmental Research and Public Health; 2020, 17 (2): 17</p> <p>Address: [Colston, Josh] Univ Virginia, Sch Med, Div Infect Dis & Int Hlth, Charlottesville, VA 22903 USA. [Olortegui, Maribel Paredes] Asociac Benef Prisma, Iquitos 16006, Peru. [Zaitchik, Benjamin] Johns Hopkins Krieger Sch Arts & Sci, Dept Earth & Planetary Sci, Baltimore, MD 21218 USA. [Yori, Pablo Penataro; Kosek, Margaret] Univ Virginia, Div Infect Dis & Int Hlth, Charlottesville, VA 22903 USA. [Kang, Gagandeep] Christian Med Coll & Hosp, Vellore 632004, Tamil Nadu, India. [Ahmed, Tahmeed] Int Ctr Diarrhoeal Dis Res Bangladesh Icdrrb, Nutr & Clin Serv Div, Dhaka 1213, Bangladesh. [Bessong, Pascal] Univ Venda, ZA-0950 Thohoyandou, South Africa. [Mduma, Esto] Haydom Global Hlth Inst, POB 9000, Haydom, Tanzania. [Bhutta, Zulfiqar] Aga Khan Univ, Dept Pediat & Child Hlth, Karachi 74800, Pakistan. [Shrestha, Prakash Sunder] Tribhuvan Univ, Inst Med, Dept Child Hlth, Kirtipur 44618, Nepal. [Lima, Aldo] Univ Fed Ceara, BR-60020181 Fortaleza, Ceara, Brazil. Kosek, M (reprint author), Univ Virginia, Div Infect Dis & Int Hlth, Charlottesville,</p>	INT	JAN TO JUN	Wellcome Research Unit	<p>WOS:000516827400108 SCOPUS H-INDEX:92 IF: 2.468 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>VA 22903 USA. josh.colston@virginia.edu; mparedeso@prisma.org.pe; zaitchik@jhu.edu; pyori@virginia.edu; gkang@cmcvellore.ac.in; tahmeed@icddr.org; Pascal.Bessong@univen.ac.za; estomduma@gmail.com; zulfigar.bhutta@aku.edu; prakashsunder@hotmail.com; alima@ufc.br; mkosek@virginia.edu</p> <p>Extreme floods pose multiple direct and indirect health risks. These risks include contamination of water, food, and the environment, often causing outbreaks of diarrheal disease. Evidence regarding the effects of flooding on individual diarrhea-causing pathogens is limited, but is urgently needed in order to plan and implement interventions and prioritize resources before climate-related disasters strike. This study applied a causal inference approach to data from a multisite study that deployed broadly inclusive diagnostics for numerous high-burden common enteropathogens. Relative risks (RRs) of infection with each pathogen during a flooding disaster that occurred at one of the sites-Loreto, Peru-were calculated from generalized linear models using a comparative interrupted time series framework with the other sites as a comparison group and adjusting for background seasonality. During the early period of the flood, increased risk of heat-stable enterotoxigenic E. coli (ST-EPEC) was identified (RR = 1.73 [1.10, 2.71]) along with a decreased risk of enteric adenovirus (RR = 0.36 [0.23, 0.58]). During the later period of the flood, sharp increases in the risk of rotavirus (RR = 5.30 [2.70, 10.40]) and sapovirus (RR = 2.47 [1.79, 3.41]) were observed, in addition to increases in transmission of Shigella spp. (RR = 2.86 [1.81, 4.52]) and Campylobacter spp. (RR = 1.41 [1.01, 1.07]). Genotype-specific exploratory analysis reveals that the rise in rotavirus transmission during the flood was likely due to the introduction of a locally atypical, non-vaccine (G2P[4]) strain of the virus. Policy-makers should target interventions towards these pathogens-including vaccines as they become available-in settings where vulnerability to flooding is high as part of disaster preparedness strategies, while investments in radical, transformative, community-wide, and locally-tailored water and sanitation interventions are also needed.</p>				
124.	<p>Cossu, G., Jouanneau, E., Cavallo, L. M., Elbabaa, S. K., Giammattei, L., Starnoni, D., Barges-Coll, J., Cappabianca, P., Benes, V., Baskaya, M. K., Bruneau, M., Meling, T., Schaller, K., Chacko, A. G., Youssef, A. S., Mazzatenta, D., Ammirati, M., Dufour, H., Laws, E., Berhouma, M., Daniel, R. T. and Messerer, M.</p> <p>Surgical management of craniopharyngiomas in adult patients: a systematic review and consensus statement on behalf of the EANS skull base section Acta Neurochirurgica; 2020, 162 (5): 1159-1177</p> <p>Address: [Cossu, Giulia; Giammattei, Lorenzo; Starnoni, Daniele; Barges-Coll, Juan; Daniel, Roy Thomas; Messerer, Mahmoud] Univ Hosp Lausanne, Dept Neurosurg, Lausanne, Switzerland. [Jouanneau, Emmanuel; Berhouma, Moncef] Hop Neurol & Neurochirurg P Wertheimer, Dept Neurosurg, Lyon, France. [Cavallo, Luigi M.;</p>	INT	JAN TO JUN	Neurological Sciences	<p>WOS:000517010900001 SCOPUS H-INDEX:91 IF: 1.834 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Cappabianca, Paolo] Univ Hosp Naples Federico II, Dept Neurosurg, Naples, NA, Italy. [Elbabaa, Samer K.] Arnold Palmer Hosp Children, Dept Pediat Neurosurg, Orlando, FL USA. [Benes, Vladimir] Cent Mil Hosp, Dept Neurosurg, Prague, Czech Republic. [Baskaya, Mustafa K.] Univ Wisconsin, Med Sch & Publ Hlth, Dept Neurol Surg, Madison, WI USA. [Bruneau, Michael] Erasme Univ Hosp, Dept Neurosurg, Brussels, Belgium. [Meling, Torstein; Schaller, Karl] Univ Hosp Geneva, Dept Neurosurg, Geneva, Switzerland. [Chacko, Ari G.] Christian Med Coll & Hosp, Dept Neurol Sci, Vellore, Tamilnadu, India. [Youssef, A. Samy] Univ Colorado, Dept Neurosurg & Otolaryngol, Sch Med, Aurora, CO USA. [Mazzatenta, Diego] Bellaria Hosp, IRCCS Inst Neurol Sci Bologna, Bologna, Italy. [Ammirati, Mario] Temple Univ, Dept Biol, Ctr Biotechnol, Coll Sci & Technol, Philadelphia, PA 19122 USA. [Dufour, Henry] Hop La Timone, Dept Neurosurg, Marseille, France. [Laws, Edward] Brigham & Womens Hosp, Pituitary Neuroendocrine Ctr, 75 Francis St, Boston, MA 02115 USA.</p> <p>Messerer, M (reprint author), Univ Hosp Lausanne, Dept Neurosurg, Lausanne, Switzerland. Mahmoud.messerer@chuv.ch</p> <p>Background and objective Craniopharyngiomas are locally aggressive neuroepithelial tumors infiltrating nearby critical neurovascular structures. The majority of published surgical series deal with childhood-onset craniopharyngiomas, while the optimal surgical management for adult-onset tumors remains unclear. The aim of this paper is to summarize the main principles defining the surgical strategy for the management of craniopharyngiomas in adult patients through an extensive systematic literature review in order to formulate a series of recommendations. Material and methods The MEDLINE database was systematically reviewed (January 1970-February 2019) to identify pertinent articles dealing with the surgical management of adult-onset craniopharyngiomas. A summary of literature evidence was proposed after discussion within the EANS skull base section. Results The EANS task force formulated 13 recommendations and 4 suggestions. Treatment of these patients should be performed in tertiary referral centers. The endonasal approach is presently recommended for midline craniopharyngiomas because of the improved GTR and superior endocrinological and visual outcomes. The rate of CSF leak has strongly diminished with the use of the multilayer reconstruction technique. Transcranial approaches are recommended for tumors presenting lateral extensions or purely intraventricular. Independent of the technique, a maximal but hypothalamic-sparing resection should be performed to limit the occurrence of postoperative hypothalamic syndromes and metabolic complications. Similar principles should also be applied for tumor recurrences. Radiotherapy or intracystic agents are alternative treatments when no further surgery is possible. A multidisciplinary long-term follow-up is necessary.</p>				
125.	Crabtree, A., Sundararaj, J. J. and Pease, N. Clinical audit? -invaluable!	INT	JAN TO JUN	Palliative Care Medicine	PMID: 31488419 WOS:000539352400023

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Bmj Supportive & Palliative Care; 2020, 10 (2): 213-215 Address: [Crabtree, Alice; Pease, Nikki] Velindre Canc Ctr, Palliat Med Dept, Cardiff CF14 2TL, Wales. [Sundararaj, Jenifer Jeba] Christian Med Coll & Hosp, Palliat Care Unit, Vellore, Tamil Nadu, India. Pease, N (reprint author), Velindre Canc Ctr, Palliat Med Dept, Cardiff CF14 2TL, Wales. nikki.pease@wales.nhs.uk</p>				<p>SCOPUS H-INDEX:27 IF: 2.922 BIOXBIO (2018/2019)</p>
126.	<p>Dabhi, P. A., Thangakunam, B., Gupta, R., James, P., Thomas, N., Naik, D. and Christopher, D. J. Screening for prevalence of current TB disease and latent TB infection in type 2 diabetes mellitus patients attending a diabetic clinic in an Indian tertiary care hospital PLoS ONE; 2020, 15 (6): Address: Department of Pulmonary Medicine, Christian Medical College, Vellore, Tamil Nadu, India Department of Respiratory Medicine, Christian Medical College, Vellore, Tamil Nadu, India Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore, India Department of Endocrinology, Jawaharlal Institute of postgraduate medical education and Research (JIPMER), Pondicherry, India</p> <p>Background Diabetes triples the risk of developing tuberculosis (TB). This study was designed to determine the prevalence of past and current TB disease and Latent TB infection (LTBI) in type 2 Diabetes Mellitus (NIDDM) patients. Design This was a prospective descriptive study on all NIDDM patients attending a Diabetic clinic. Detailed history, included details of previous history of TB (Past TB) and symptoms of active TB and a thorough physical exam was also done. When clinical suspicion of TB was present, appropriate investigations were carried out to diagnose 'Current TB'. Subsequently, 200 consecutive patients who were negative for Past and Current TB were screened for Latent TB infection (LTBI) by tuberculin skin test. Results Of 1000 NIDDM patients enrolled, 43(4.3%) had Past TB. Of remaining 957 patients, 50 were evaluated for New TB on the basis of suggestive symptoms and 10(1%) patients were confirmed to have Current TB. Risk factors for Past or Current TB 'DM-TB' in comparison with 'DM Only' group were; male sex (72% VS 57%; P = 0.033), manual laborer (28% VS 15%; P = 0.012), smoking (26% VS 14%; P = 0.015), alcohol consumption (23% VS 9%; P<0.001) & being on treatment with Insulin (40% VS 20%; P<0.001). There was a protective effect with being a home maker (17% VS 37%; P = 0.034) & overweight status (53% VS 71%; P = 0.004). Of the 200 patient without Past or Current TB, who were screened for LTBI, 96 (48%) patients were found to have LTBI. Male sex was the only significant risk factor for LTBI (72% VS 59%; P = 0.05). Conclusion Past and Current TB was substantial in patients attending a Diabetic Clinic. Active symptom screening for TB</p>	INT	JAN TO JUN	Pulmonary Medicine, Respiratory Medicine, Endocrinology	<p>SCOPUS H-INDEX:300 IF: 2.776 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	in these clinics could lead to increase in case detection and earlier diagnosis. © 2020 Dabhi et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.				
127.	<p>Danda, D., Goel, R., Joseph, G., Kumar, S. T., Nair, A., Ravindran, R., Jeyaseelan, L., Merkel, P. A. and Grayson, P. C.</p> <p>Clinical course of 602 patients with Takayasu's arteritis: comparison between Childhood-onset versus adult onset disease</p> <p>Rheumatology (Oxford); 2020, Address: Department of Clinical Immunology and Rheumatology. Department of Cardiology. Department of Child Health, Christian Medical College, Vellore, India. Department of Biostatistics, Christian Medical College, Vellore, India. Division of Rheumatology, Department of Medicine, Department of Biostatistics, Epidemiology, and Informatics, University of Pennsylvania, Philadelphia, PA, USA. Systemic Autoimmunity Branch/NIAMS, National Institutes of Health, Bethesda, MD, USA.</p> <p>OBJECTIVES: To describe the clinical profile of Asian Indian patients with Takayasu's arteritis (TAK) and to compare clinical features and outcome of childhood-onset Takayasu's arteritis (cTAK) with adult-onset TAK (aTAK). METHODS: Data related to clinical features and response to treatment of patients with cTAK (age of onset <16 years) and aTAK from a large observational cohort in our tertiary care teaching hospital were noted and compared. RESULTS: Altogether, 602 patients (cTAK = 119; aTAK = 483) were studied. Patients with cTAK had a blunted female: male ratio; but fever, elevated acute phase reactants, involvement of abdominal aorta or its branches, hypertension, abdominal pain, elevated serum creatinine and cardiomyopathy were more common in cTAK as compared with aTAK. Patients with aTAK were more likely to have aortic-arch disease and claudication than cTAK. During follow-up, complete remission was more common in cTAK (87% vs 66%; P < 0.01), but subsequent relapses were equally common (30% vs 27%; P = 0.63). Independent associations of disease duration at presentation with disease extent [Disease Extent Index in TAK (DEI.Tak)] and damage [TAK Damage Score (TADS)] were observed (P ≤ 0.01). Moreover, 54% of patients with symptom duration of >5 years at presentation still continued to have elevated CRP suggesting continued and active inflammation warranting escalation or initiation of immunosuppression. CONCLUSION: Patients with cTAK are more likely to have arterial disease below the diaphragm, systemic inflammation and achieve remission. Disease of the aortic arch is more common in patients with aTAK. Longer duration of symptoms prior to initiation of immunosuppression, thereby leading to extensive disease and damage, reflects ongoing disease activity as the rule rather than exception in untreated TAK.</p>	INT	JUL TO DEC	Clinical Immunology and Rheumatology, Cardiology, Child Health, Biostatistics	PMID: 33179052
128.	Danda, S., Mohan, S., Devaraj, P., Dutta, A. K., Nampoothiri, S., Yesodharan, D.,	INT	JAN TO JUN	Medical Genetics	SCOPUS

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Phadke, S. R., Jalan, A. B., Thangaraj, K., Verma, I. C., Danda, D. and Jebaraj, I. Founder effects of the homogentisate 1,2-dioxygenase (HGD) gene in a gypsy population and mutation spectrum in the gene among alkaptonuria patients from India Clinical Rheumatology; 2020, Address: Department of Medical Genetics, Christian Medical College and Hospital Vellore, OT Block 5th Floor, Vellore, Tamil Nadu 632004, India Amrita Institute of Medical Sciences & Research Centre, Cochin, Kerala, India Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, UP, India Navi Mumbai Institute of Research in Mental and Neurological Handicap Navi Mumbai, Navi Mumbai, India Centre of Cellular and Molecular Biology, Hyderabad, Telangana, India Institute of Genetics and Genomics, Sir Ganga Ram Hospital, Rajender Nagar, New Delhi, India Department of Clinical Immunology & Rheumatology, Christian Medical College Vellore and Hospital, Vellore, Tamil Nadu, India Department of Orthopedics, Christian Medical College Vellore and Hospital, Vellore, Tamil Nadu, India</p> <p>Introduction: Alkaptonuria (AKU) is a rare metabolic disease. The global incidence is 1:100,000 to 1:250,000. However, identification of a founder mutation in a gypsy population from India prompted us to study the prevalence of AKU in this population and to do molecular typing in referred cases of AKU from the rest of India. Objective: To determine the prevalence of AKU in the gypsy population predominantly residing in the seven districts of Tamil Nadu. To determine the molecular characteristic of AKU cases referred to our clinic from various parts of India. Method: Urine spot test to detect homogentisic acid followed by quantitative estimation using high-performance liquid chromatography in 499 participants from the gypsy population and confirming the founder mutation in those with high levels by sequencing. Sequence the homogentisate 1,2-dioxygenase (HGD) gene to identify mutations and variants in 29 AKU non-gypsy cases. Results: The founder mutation was detected in homozygous state in 41/499 AKU-affected individuals of the gypsy community giving a high prevalence of 8.4%. Low back pain, knee pain, and eye and ear pigmentation were the most common symptoms and signs respectively. The commonest mutation identified in the non-gypsy AKU cases was p.Ala122Val. Conclusion: High prevalence of AKU in the inbred gypsy population at 8.4% was detected confirming the founder effect. Urine screening provided a cost-effective method to detect the disease early. Mutation spectrum is varied in the rest of the Indian population. This study identified maximum number of mutations in exon 6 of the HGD gene. Key Points • High prevalence (8.4%) of alkaptonuria (AKU) in the gypsy population due to founder mutation in the HGD gene. • Inbreeding exemplifies the founder effects of this rare genetic disorder. • Urinary screening is a cost-effective method in this community for early detection of AKU and intervention. • The mutation spectrum causing AKU is diverse in the rest of the</p>				<p>H-INDEX:79 IF: 2.293 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Indian population. © 2020, International League of Associations for Rheumatology (ILAR).				
129.	Danda, S., Thomas, B. M., Paramshivam, G., Thomas, R., Mathew, J. and Danda, D. Authors' response Indian J Med Res; 2020, 152 (4): 430-431 Address: Clinical Genetics Unit, Christian Medical College & Hospital, Vellore 632 004, Tamil Nadu, India. Department of Physical Medicine and Rehabilitation, Christian Medical College & Hospital, Vellore 632 004, Tamil Nadu, India. Department of Clinical Immunology and Rheumatology, Christian Medical College & Hospital, Vellore 632 004, Tamil Nadu, India.	NAT	JUL TO DEC	Clinical Genetics Unit, Physical Medicine and Rehabilitation, Clinical Immunology and Rheumatology	PMID: 33380712 WOS:000606862900018
130.	Dandona, R., Kumar, G. A., Henry, N. J., Joshua, V., Ramji, S., Gupta, S. S., Agrawal, D., Kumar, R., Lodha, R., Mathai, M., Kassebaum, N. J., Pandey, A., Wang, H. D., Sinha, A., Hemalatha, R., Abdulkader, R. S., Agarwal, V., Albert, S., Biswas, A., Burstein, R., Chakma, J. K., Christopher, D. J., Collison, M., Dash, A. P., Dey, S., Dicker, D., Gardner, W., Glenn, S. D., Golechha, M. J., He, Y. H., Jerath, S. G., Kant, R., Kar, A., Khera, A. K., Kinra, S., Koul, P. A., Krish, V., Krishnankutty, R. P., Kurpad, A. V., Kyu, H. H., Laxmaiah, A., Mahanta, J., Mahesh, P. A., Malhotra, R., Mamidi, R. S., Manguerra, H., Mathew, J. L., Mathur, M. R., Mehrotra, R., Mukhopadhyay, S., Murthy, G. V. S., Mutreja, P., Nagalla, B., Nguyen, G., Oommen, A. M., Pati, A., Pati, S., Perkins, S., Prakash, S., Purwar, M., Sagar, R., Sankar, M. J., Saraf, D. S., Shukla, D. K., Shukla, S. R., Singh, N. P., Sreenivas, V., Tandale, B., Thankappan, K. R., Tripathi, M., Tripathi, S., Tripathy, S., Troeger, C., Varghese, C. M., Varughese, S., Watson, S., Yadav, G., Zodpey, S., Reddy, K. S., Toteja, G. S., Naghavi, M., Lim, S. S., Vos, T., Bekeadam, H. J., Swaminathan, S., Murray, C. J. L., Hay, S. I., Sharma, R. S., Dandona, L. and India State-Level Dis, Burden Subnational mapping of under-5 and neonatal mortality trends in India: the Global Burden of Disease Study 2000-17 Lancet; 2020, 395 (10237): 1640-1658 Address: [Dandona, Rakhi; Kumar, G. Anil; Pandey, Anamika; Krishnankutty, Rinu P.; Malhotra, Ridhima; Mathur, Manu R.; Mutreja, Parul; Varghese, Chris M.; Reddy, K. Srinath; Dandona, Lalit] Publ Hlth Fdn India, Gurugram, India. [Dandona, Rakhi; Henry, Nathaniel J.; Kassebaum, Nicholas J.; Wang, Haidong; Burstein, Roy; Collison, Michael; Dicker, Daniel; Gardner, William; Glenn, Scott D.; He, Yihua; Krish, Varsha; Kyu, Hmwe H.; Manguerra, Helena; Nguyen, Grant; Perkins, Samantha; Troeger, Christopher; Watson, Stefanie; Naghavi, Mohsen; Lim, Stephen S.; Vos, Theo; Murray, Christopher J. L.; Hay, Simon, I; Dandona, Lalit] Univ Washington, Inst Hlth Metr & Evaluat, Seattle, WA 98195 USA. [Joshua, Vasna] Indian Council Med Res, Natl Inst Epidemiol, Chennai, Tamil Nadu, India. [Ramji, Siddarth] Maulana Azad Med Coll, Dept Paediat, New Delhi, India. [Gupta, Subodh S.] Mahatma Gandhi Inst Med Sci, Dept Community Med, Wardha, India. [Agrawal, Deepti; Bekeadam, Hendrik J.] WHO India Country Off, New Delhi, India. [Kumar, Rashmi] King Georges Med	INT	JAN TO JUN	Pulmonary Medicine, Community Health, Nephrology	WOS:000540986100027 H-INDEX:747 IF: 59.102 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Univ, Dept Paediat, Lucknow, Uttar Pradesh, India. [Agarwal, Vivek] King Georges Med Univ, Dept Psychiat, Lucknow, Uttar Pradesh, India. [Tripathi, Suryakant] King Georges Med Univ, Dept Pulm & Crit Care Med, Lucknow, Uttar Pradesh, India. [Lodha, Rakesh; Sankar, Mari J.] All India Inst Med Sci, Dept Paediat, New Delhi, India. [Sagar, Rajesh] All India Inst Med Sci, Dept Psychiat, New Delhi, India. [Sreenivas, V] All India Inst Med Sci, Dept Biostat, New Delhi, India. [Tripathi, Manjari] All India Inst Med Sci, Dept Neurol, Neurosci Ctr, New Delhi, India. [Mathai, Matthews] Univ Liverpool Liverpool Sch Trop Med, Ctr Maternal & Newborn Hlth, Liverpool, Merseyside, England. [Sinha, Anju; Chakma, Joy K.; Kant, Rajni; Mehrotra, Ravi; Saraf, Deepika S.; Shukla, D. K.; Yadav, Geetika; Toteja, G. S.; Sharma, R. S.; Dandona, Lalit] Indian Council Med Res, New Delhi 110290, India. [Hemalatha, Rajkumar; Laxmaiah, Avula; Mamidi, Raja S.; Nagalla, Balakrishna] Indian Council Med Res, Natl Inst Nutr, Hyderabad, India. [Abdulkader, Rizwan S.] Manonmaniam Sundaranar Univ, Dept Stat, Tirunelveli, India. [Albert, Sandra] Publ Hlth Fdn India, Indian Inst Publ Hlth Shillong, Shillong, Meghalaya, India. [Biswas, Atanu] Bangur Inst Neurosci, Kolkata, India. [Christopher, D. J.] Christian Med Coll & Hosp, Dept Pulm Med, Vellore, Tamil Nadu, India. [Oommen, Anu M.] Christian Med Coll & Hosp, Community Hlth Dept, Vellore, Tamil Nadu, India. [Varughese, Santosh] Christian Med Coll & Hosp, Dept Nephrol, Vellore, Tamil Nadu, India. [Dash, A. P.] Cent Univ Tamil Nadu, Thiruvavur, India. [Dey, Sagnik] Indian Inst Technol, Ctr Atmospher Sci, New Delhi, India. [Golechha, Mahaveer J.] Publ Hlth Fdn India, Indian Inst Publ Hlth Gandhinagar, Gandhinagar, India. [Jerath, Suparna G.; Zodpey, Sanjay] Publ Hlth Fdn India, Indian Inst Publ Hlth Delhi, Gurugram, India. [Kar, Anita] Savitribai Phule Pune Univ, Sch Hlth Sci, Pune, Maharashtra, India. [Khera, Ajay K.; Pati, Ashalata] Govt India, Minist Hlth & Family Welf, New Delhi, India. [Kinra, Sanjay] London Sch Hyg & Trop Med, Dept Noncommunicable Dis Epidemiol, London, England. [Koul, Parvaiz A.] Sherikashmir Inst Med Sci, Dept Internal & Pulm Med, Srinagar, India. [Kurpad, Anura, V] St Johns Med Coll, Dept Physiol & Nutr, Bengaluru, India. [Mahanta, Jagadish] Indian Council Med Res, Reg Med Res Ctr, Northeast Reg, Dibrugarh, Assam, India. [Mahesh, P. A.] Jagadguru Sri Shivarathreeshwara Univ, Jagadguru Sri Shivarathreeshwara Med Coll, Dept Pulm Med, Mysore, Karnataka, India. [Mathew, Joseph L.] Post Grad Inst Med Educ & Res, Adv Pediat Ctr, Chandigarh, India. [Mukhopadhyay, Satinath] Inst Post Grad Med Educ & Res, Dept Endocrinol & Metab, Kolkata, India. [Murthy, G. V. S.] Publ Hlth Fdn India, Indian Inst Publ Hlth Hyderabad, Hyderabad, India. [Pati, Sanghamitra] Indian Council Med Res, Reg Med Res Ctr, Bhubaneswar, India. [Prakash, Sanjay] SSG Hosp, Med Coll, Dept Neurol, Baroda, Gujarat, India. [Purwar, Manorama] Ketkar Hosp, Nagpur INTERGROWTH Res Ctr 21, Nagpur, Maharashtra, India. [Shukla, Sharvari R.] King Edward Mem Hosp Res Ctr, Kamalnayan Bajaj Diabetol Res Ctr, Pune, Maharashtra, India. [Shukla, Sharvari R.] Symbiosis Int Univ, Symbiosis Inst Hlth Sci, Pune, Maharashtra, India. [Singh, Narinder P.] Max Super Special Hosp, Ghaziabad, India. [Tandale, Babasaheb] Indian Council Med Res, Natl Inst Virol, Pune, Maharashtra, India. [Thankappan, Kavumpurathu R.] Sree Chitra Tirunal Inst Med Sci & Technol, Achutha Menon Ctr Hlth Sci Studies, Trivandrum,</p>				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Kerala, India. [Tripathy, Srikanth] Indian Council Med Res, Natl Inst Res TB, Chennai, Tamil Nadu, India. [Swaminathan, Soumya] WHO, Geneva, Switzerland. Dandona, L (reprint author), Indian Council Med Res, New Delhi 110290, India. lalit.dandona@icmr.gov.in</p> <p>Background India has made substantial progress in improving child survival over the past few decades, but a comprehensive understanding of child mortality trends at disaggregated geographical levels is not available. We present a detailed analysis of subnational trends of child mortality to inform efforts aimed at meeting the India National Health Policy (NHP) and Sustainable Development Goal (SDG) targets for child mortality. Methods We assessed the under-5 mortality rate (U5MR) and neonatal mortality rate (NMR) from 2000 to 2017 in 5 x 5 km grids across India, and for the districts and states of India, using all accessible data from various sources including surveys with subnational geographical information. The 31 states and groups of union territories were categorised into three groups using their Socio-demographic Index (SDI) level, calculated as part of the Global Burden of Diseases, Injuries, and Risk Factors Study on the basis of per-capita income, mean education, and total fertility rate in women younger than 25 years. Inequality between districts within the states was assessed using the coefficient of variation. We projected U5MR and NMR for the states and districts up to 2025 and 2030 on the basis of the trends from 2000 to 2017 and compared these projections with the NHP 2025 and SDG 2030 targets for U5MR (23 deaths and 25 deaths per 1000 livebirths, respectively) and NMR (16 deaths and 12 deaths per 1000 livebirths, respectively). We assessed the causes of child death and the contribution of risk factors to child deaths at the state level. Findings U5MR in India decreased from 83.1 (95% uncertainty interval [UI] 76.7-90.1) in 2000 to 42.4 (36.5-50.0) per 1000 livebirths in 2017, and NMR from 38.0 (34.2-41.6) to 23.5 (20.1-27.8) per 1000 livebirths. U5MR varied 5.7 times between the states of India and 10.5 times between the 723 districts of India in 2017, whereas NMR varied 4.5 times and 8.0 times, respectively. In the low SDI states, 275 (88%) districts had a U5MR of 40 or more per 1000 livebirths and 291 (93%) districts had an NMR of 20 or more per 1000 livebirths in 2017. The annual rate of change from 2010 to 2017 varied among the districts from a 9.02% (95% UI 6.30-11.63) reduction to no significant change for U5MR and from an 8.05% (95% UI 5.34-10.74) reduction to no significant change for NMR. Inequality between districts within the states increased from 2000 to 2017 in 23 of the 31 states for U5MR and in 24 states for NMR, with the largest increases in Odisha and Assam among the low SDI states. If the trends observed up to 2017 were to continue, India would meet the SDG 2030 U5MR target but not the SDG 2030 NMR target or either of the NHP 2025 targets. To reach the SDG 2030 targets individually, 246 (34%) districts for U5MR and 430 (59%) districts for NMR would need a higher rate of improvement than they had up to 2017. For all major causes of under-5 death in India, the death rate decreased between 2000 and 2017, with the highest decline for infectious diseases, intermediate decline for neonatal disorders, and the smallest decline for congenital</p>				

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	<p>birth defects, although the magnitude of decline varied widely between the states. Child and maternal malnutrition was the predominant risk factor, to which 68.2% (65.8-70.7) of under-5 deaths and 83.0% (80.6-85.0) of neonatal deaths in India could be attributed in 2017; 10.8% (9.1-12.4) of under-5 deaths could be attributed to unsafe water and sanitation and 8.8% (7.0-10.3) to air pollution. Interpretation India has made gains in child survival, but there are substantial variations between the states in the magnitude and rate of decline in mortality, and even higher variations between the districts of India. Inequality between districts within states has increased for the majority of the states. The district-level trends presented here can provide crucial guidance for targeted efforts needed in India to reduce child mortality to meet the Indian and global child survival targets. District-level mortality trends along with state-level trends in causes of under-5 and neonatal death and the risk factors in this Article provide a comprehensive reference for further planning of child mortality reduction in India. Copyright (C) 2020 World Health Organization; licensee Elsevier.</p>				
131.	<p>Daniel, H. D. J., Kumar, S., Kannangai, R., Lakshmi, K. M., Agbandje-Mckenna, M., Coleman, K. E., Srivastava, A. and Abraham, A. M. Prevalence of AAV3 capsid binding and neutralizing antibodies in healthy and individuals with hemophilia B from India Hum Gene Ther; 2020, Address: Christian Medical College and Hospital Vellore, 30025, Clinical Virology, ASHA Building, 9th Floor, Vellore, Tamil Nadu, India, 632004; hubertdariusj@yahoo.com. Christian Medical College and Hospital Vellore, 30025, Center for Stem Cell Research, Vellore, Tamil Nadu, India; skumar@cmcvellore.ac.in. Christian Medical College and Hospital Vellore, 30025, Clinical Virology, Vellore, Tamil Nadu, India; kannangair@cmcvellore.ac.in. Christian Medical College, Haematology, Vellore, Tamil Nadu, India; survey@cmcvellore.ac.in. University of Florida, 3463, Biochemistry and Molecular Biology, 1200 Newell Drive, Gainesville, Florida, United States, 32611-7011; mckenna@ufl.edu. University of Florida, Pediatrics, Powell Gene Therapy Center, 1200 Newell Dr, Box 100296, Gainesville, Florida, United States, 32610; erger@gtc.ufl.edu. University Of Florida College of Medicine, Division of Cellular & Molecular Therapy, Departments of Pediatrics and Molecular Genetics & Microbiology, PO Box 100196, 1600 SW Archer Road, RG 183-A, Gainesville, Florida, United States, 32610; aruns@peds.ufl.edu. Christian Medical College, Centre for Stem Cell Research, Vellore, Tamilnadu, India. Christian Medical College, Haematology, Ida Scudder Road, Vellore, Tamil Nadu, India, 632004; aloks@cmcvellore.ac.in. Christian Medical College and Hospital Vellore, 30025, Clinical Virology, Vellore, Tamil Nadu, India; asha_ma@cmcvellore.ac.in. Adeno-associated virus (AAV)-based gene therapy offers a new treatment option</p>	INT	JUL TO DEC	Clinical Virology, Center for Stem Cell Research, Haematology	PMID: 33207962

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	for individuals with haemophilia. The results of earlier AAV-based trials using AAV2-human Factor IX (hFIX) gene for the treatment of patients with haemophilia B (HB) demonstrated limited efficacy possibly because of pre-existing neutralizing antibodies against the capsid limiting target tissue transduction and expression of hFIX. Even relatively low titers of AAV neutralizing antibodies (NAb) from natural AAV infections against the capsid have been shown to inhibit transduction of intravenously administered AAV in animal models and were associated with limited efficacy in human trials. Thus, in the gene therapy field, primary eligibility for enrolment in the clinical administration of AAV is an important issue for prior screening of potential candidates for optimal therapeutic protein expression over time. Furthermore, success depends on accurate assessment of pre-existing AAV-specific neutralizing antibodies in the selected cohort for determining efficacy, safety and ethical considerations. Current techniques to screen AAV-antibodies are transduction inhibition assay (TIA) for neutralizing antibodies and AAV capsid ELISA for total antibodies. This study developed and screened for total capsid binding anti-AAV3 antibodies using ELISA and determined neutralizing antibody levels by TIA using mCherry flow cytometry in healthy and individuals with hemophilia B in India. One hundred and forty-three apparently healthy controls and 92 individuals with hemophilia B were screened. The prevalence of total and neutralizing antibody in healthy controls were 79.7% and 65% respectively and the prevalence of total and neutralizing antibody in hemophilia B patients for AAV3 was 92.4% and 91.3% respectively.				
132.	Daniel, P., Prasad, M., Jacob, J., Rabi, S., Holla, S. J. and Zachariah, A. Blended Learning Program in Human Anatomy for Undergraduate Medical Students Journal of Anatomy; 2020, 236 230-231 Address: [Daniel, Priyanka; Prasad, Mythraeyee; Jacob, Jenny; Rabi, Suganthy; Holla, Sunil Jonathan; Zachariah, Anand] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India.	INT	JAN TO JUN	Anatomy	WOS:000524885900423 H-INDEX:112 IF: 2.638 BIOXBIO (2018/2019)
133.	Darling Rasmussen, P., Bilenberg, N., Kirubakaran, R. and Storebø, O. J. Mapping factors facilitating resilience in mothers - potential clinical relevance for children with ADHD Nord J Psychiatry; 2020, 1-4 Address: Psychiatric Research Unit, Region Zealand, Slagelse, Denmark. Child and Adolescent Psychiatric Department, and Psychiatric Research Unit, University of Southern Denmark, Odense, Denmark. Prof. BV Moses Centre for Evidence-Informed Healthcare and Health Policy, Clinical Epidemiology Unit, Christian Medical College, Vellore, India. Department of Psychology, University of Southern Denmark, Odense, Denmark. Background: Attention Deficit Hyperactivity Disorder (ADHD) is one of the most	INT	JAN TO JUN	Clinical Epidemiology Unit	PMID:32255402 SCOPUS H-INDEX:51 IF: 2.061 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>common neurobiological disorders in childhood. Maternal resilience has been linked to treatment outcome in child ADHD. However, not much is known about factors that may facilitate maternal resilience. Aim: The aim of this study was to explore factors potentially facilitating resilience in mothers to children with ADHD. Method: The current study was part of a naturalistic observational study. 64 mothers to children diagnosed with ADHD completed a set of questionnaires and a short protocol including demographic and psychosocial items. Correlation matrix were estimated for each of the scores to establish the relationship between them. Results: We found significant negative correlations between maternal self-reported attachment style and self-reported resilience and between self-reported ADHD-symptoms and resilience-score. Conclusion: The findings indicate that selected factors in maternal functioning may contribute to development of resilience, which may in turn be a factor of importance in parenting. © 2020, © 2020 The Nordic Psychiatric Association.</p>				
134.	<p>Das, A., Surendran, S., Mathew, M., Irodi, A., Singh, A., Joel, A., Yacob, M., Isiah, R., Samarasam, I., John, S., Pavamani, S. and Sasidharan, B. K. Patterns of Recurrence in Locally Advanced Resectable Oesophageal Carcinoma: Retrospective Review from a Tertiary Cancer Centre in South India J Gastrointest Cancer; 2020, Address: Department of Radiation Oncology, Ida B. Scudder Cancer Centre, Christian Medical College, Vellore, Tamil Nadu, 632004, India. Department of Upper GI Surgery, Christian Medical College, Vellore, Tamil Nadu, 632004, India. Division of Clinical Radiology, Department of Radiodiagnosis, Christian Medical College, Vellore, Tamil Nadu, 632004, India. Department of Medical Oncology, Christian Medical College, Vellore, Tamil Nadu, 632004, India. Department of Radiation Oncology, Ida B. Scudder Cancer Centre, Christian Medical College, Vellore, Tamil Nadu, 632004, India. balunair@cmcvellore.ac.in. PURPOSE: The study aims to analyse patterns of recurrence following neoadjuvant treatment and surgery in carcinoma oesophagus with an intent to postulate optimal nodal radiation. METHODOLOGY: A retrospective review of patients who presented to our centre within a 5-year period (2014-2018), with recurrence following sequential neoadjuvant treatment and radical surgery, was conducted in this single-institution study. The patterns of recurrence and duration of disease-free survival were analysed. RESULTS: Twenty-one patients (14 men, 7 women) presented with recurrence, of which 13, 7, and 1 patient(s) had received NACT, NACTRT, or both, respectively. Six patients who did not receive neoadjuvant radiotherapy received adjuvant RT. Among the 10 patients who had nodal recurrence after RT (either neoadjuvant or adjuvant), 6 and 4 patients had in-field and out-of-field nodal recurrences, respectively-the latter were equally distributed within 5 cm and outside 5 cm of the PTV margin. CONCLUSION: Among the patients who presented with recurrence, more than half had not received neoadjuvant RT</p>	INT	JUL TO DEC	Radiation Oncology, Upper GI Surgery, Radiodiagnosis, Medical Oncology, Radiation Oncology	PMID: 32720121

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	(treated in the 'pre-CROSS era' or due to long-segment disease), reasserting the therapeutic superiority of NACTRT. Increased regularity of recurrences in the draining nodal region was not noted in this study, but large-scale, prospective, randomised head-to-head comparative trials to determine optimal nodal irradiation in carcinoma oesophagus are required.				
135.	<p>Das, S., Gunasekaran, K., Ajjampur, S. S. R., Abraham, D., George, T., Janeela, M. A. and Iyadurai, R. Acanthamoeba encephalitis in immunocompetent hosts: A report of two cases J Family Med Prim Care; 2020, 9 (2): 1240-1243</p> <p>Address: Department of Medicine, Christian Medical College, Vellore, Tamil Nadu, India. The Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Acanthamoeba are ubiquitous free-living amoeba. Acanthamoeba infections cause necrotizing vasculitis, resulting in vessel thrombosis and cerebral infarction. Acanthamoeba CNS infections, though uncommon, are associated with high mortality. Diagnosis is difficult and often delayed. Here, we present two immunocompetent hosts with Acanthamoeba encephalitis with good outcomes.</p>	NAT	JAN TO JUN	Wellcome Research Unit	<p>PMID:32318505 PMC ID: PMC7114032 H-INDEX:NA IF: 0.210 RG (2018/2019)</p>
136.	<p>Das, S., Ninan, G. A., Jasper, S., George, M. and Iyadurai, R. Spotted fever rickettsiosis presenting with bilateral anterior uveitis and retinitis: A case report J Family Med Prim Care; 2020, 9 (2): 1236-1239</p> <p>Address: Department of Medicine, Christian Medical College, Vellore, Tamil Nadu, India. Department of Ophthalmology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Spotted fever is a common rickettsial disease in India. It is caused by Rickettsia conorii, which demonstrates vascular tropism and causes endothelial injury. Ocular manifestations include multifocal retinitis and disc edema. Anterior uveitis as a presenting feature of spotted fever is uncommon. We present a 32-year-old man with spotted fever and bilateral anterior uveitis.</p>	NAT	JAN TO JUN	Wellcome Research Unit	<p>PMID:32318504 PMC ID: PMC7114010 H-INDEX:NA IF: 0.210 RG (2018/2019)</p>
137.	<p>Dasgupta, R., Atri, A., Jebasingh, F., Hepzhibah, J., Christudoss, P., Asha, H. S., Paul, T. V. and Thomas, N. PLATELET-LYMPHOCYTE RATIO (PLR) AS A NOVEL SURROGATE MARKER TO DIFFERENTIATE THYROTOXIC PATIENTS WITH GRAVES' DISEASE (GD) FROM SUB-ACUTE THYROIDITIS (SAT): A CROSS-SECTIONAL STUDY FROM SOUTH INDIA Endocr Pract; 2020, Address: From: Department of Endocrinology, Christian Medical College &</p>	INT	JAN TO JUN	Endocrinology, Nuclear Medicine, Clinical Biochemistry	<p>PMID:32407659 WOS:000576493000001 H-INDEX:82 IF: 4.149 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Hospital, Vellore, Tamil Nadu, India. Department of Nuclear Medicine, Christian Medical College & Hospital, Vellore, Tamil Nadu, India. Department of Clinical Biochemistry, Christian Medical College & Hospital, Vellore, Tamil Nadu, India.</p> <p>Background: Graves' disease (GD) and the toxic phase of subacute thyroiditis (SAT), have similar clinical and biochemical presentations, and differentiating them requires sophisticated investigations. Since thyroid hormones have been noted to affect all hematologic cell lines, we have used the platelet lymphocyte ratio (PLR) - an index usually utilized in inflammatory or malignant disorders, to compare patients with and without thyrotoxicosis and to analyse it's use in distinguishing between patients with GD and SAT prior to therapy. Methods: This was a cross-sectional study conducted in the Department of Endocrinology, CMC Vellore, India. During the study period, n=800 patients with features of thyrotoxicosis visited the outpatient clinic. Those who had I-131 thyroid uptake study (RAIU) and complete blood counts (CBC) at diagnosis were included (n=500). Based on the RAIU values, these were divided as GD (n=354) and SAT (n=146). Baseline characteristics, thyroid function tests, components of the CBC and PLR were obtained. The data was compared with a group of n=250 matched euthyroid controls. Analysis was performed using SPSS version 21.0 software. Results: PLR showed significant reductions in both GD and SAT patients when compared to euthyroid controls (p=0.01), with greater reductions seen in GD than SAT (74.5±19 vs 84.4±26, p=0.01). Using ROC-analysis of PLR, an optimal PLR cut-off of 70.4 was found to differentiate GD from SAT with a sensitivity of 86% and specificity of 74%. Conclusion: PLR can be used as a novel surrogate marker to differentiate between patients with GD and SAT prior to therapy, especially in resource-limited settings.</p>				
138.	<p>Dash, N. and Rose, W. Typhoid Conjugate Vaccine: Is It Time for It To Be in the National Immunization Schedule? Indian Pediatr; 2020, 57 (7): 609-610 Address: Department of Pediatrics and Pediatric Infectious Diseases, Christian Medical College, Vellore 632004 Tamil Nadu, India. Department of Pediatrics and Pediatric Infectious Diseases, Christian Medical College, Vellore 632004 Tamil Nadu, India. winsleyrose@cmcvellore.ac.in</p>	NAT	JUL TO DEC	Pediatrics and Pediatric Infectious Diseases	PMID: 32727935
139.	<p>Dash, N., Awasthi, P. R. and Nallasamy, K. India's COVID-19 Testing Strategy: Why Pediatric Hospitals Need to Focus More on ILI than SARI? Indian Journal of Pediatrics; 1</p> <p>Address: [Dash, Nabaneeta] Christian Med Coll & Hosp, Pediat Infect Dis Unit, Vellore, Tamil Nadu, India. [Awasthi, Pusp Raj; Nallasamy, Karthi] Postgrad Inst Med Educ & Res, Dept Pediat, Pediat Emergency & Intens Care Unit, Chandigarh,</p>	NAT	JAN TO JUN	Pediatric Infectious Disease	WOS:000539195200001 SCOPUS H-INDEX:46 IF: 1.136 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	India. Nallasamy, K (reprint author), Postgrad Inst Med Educ & Res, Dept Pediat, Pediat Emergency & Intens Care Unit, Chandigarh, India. ny.karthi@gmail.com				
140.	Datta, A., Thomas, A., George, R., Sebastian, A., Thomas, V., Thomas, D. S., Ram, T. S., Daniel, S., Karuppusami, R. and Peedicayil, A. Synchronous Tumours in Gynaecological Malignancies Indian Journal of Gynecologic Oncology; 2020, 18 (2): Address: Department of Gynaecologic Oncology, Christian Medical College, Vellore , Tamil Nadu 632004, India Department of Radiation Oncology, Christian Medical College, Vellore , Tamil Nadu 632004, India Department of Pathology, Christian Medical College, Vellore , Tamil Nadu 632004, India Department of Biostatistics, Christian Medical College, Vellore , Tamil Nadu 632004, India Background: Synchronous gynaecological tumours, being a rare entity, cause a diagnostic and management conundrum for oncologists using the current criteria for diagnosis. Objective: This study was conducted to identify the clinicopathological characteristics, treatment received and survival outcomes in women diagnosed with synchronous gynaecological cancers. Methods: A retrospective analysis was performed of patients diagnosed with synchronous gynaecological malignancies between January 2011 and December 2015 of at least two of the following sites: endometrium, cervix or ovary. Data were collected from electronic medical records. Categorical data were analysed by X2 test and Fischer's test as appropriate. Survival was plotted by Kaplan–Meier curves. Results: The study identified 20 patients diagnosed with synchronous cancers during this time: 19 cases had synchronous carcinoma of endometrium and ovary and one of cervix and ovary. The mean age at diagnosis was 48.6 years. Mean BMI was 27.4 kg/m2. Commonest presenting symptom was lower abdominal pain in 85% of women. Commonest synchronous tumour was endometrioid tumours of both endometrium and ovary. All patients underwent surgery followed by adjuvant treatment; 14 (70%) had chemotherapy, while 5 (25%) had chemo radiation. Of the 20 patients in our study group, 11(55%) patients had complete response, 8 (40%) had recurred after complete treatment, and 7 (35%) had expired. Extra pelvic extension and tumour size were important prognostic factors in determining the outcome. Overall survival was 38.5 months. Conclusions: Synchronous tumours tend to occur more frequently in young and parous women. Endometrial tumours synchronous to ovary were more common. It is important to recognise synchronous tumours as the postoperative adjuvant therapy can be tailored to achieve better survival. © 2020, Association of Gynecologic Oncologists of India.	NAT	JAN TO JUN	Gynaecologic Oncology, Radiation Oncology, Pathology, Biostatistics	SCOPUS H-INDEX:2 IF: 1.700 RG (2018/2019)
141.	David, Deepu and Eapen, Chundamannil E.	INT	JUL TO DEC	Hepatology	

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>What Are the Current Pharmacological Therapies for Nonalcoholic Fatty Liver Disease ? Journal of Clinical and Experimental Hepatology; 2020, Published:September 10, 2020DOI:https://doi.org/10.1016/j.jceh.2020.09.001</p> <p>Of the currently available drugs tested to treat nonalcoholic fatty liver disease (NAFLD), the most efficacious drugs are pioglitazone (an insulin sensitizer) and vitamin E (an antioxidant). By targeting insulin resistance, the key pathogenic mechanism underlying metabolic syndrome and NAFLD, pioglitazone maybe the preferred drug to treat NAFLD. As we await the results of research trials into multiple new drugs to treat NAFLD, when should we use the currently available patients to treat NAFLD at the present time? To date, no drug has been approved by regulatory agency specifically to treat NAFLD. However, many drugs have been approved to treat other components of metabolic syndrome such as diabetes mellitus and dyslipidemia. Are we underutilizing the currently available drugs to treat NAFLD? Herein, we review the benefits and concerns of the use of these currently available drugs to treat NAFLD and suggest clinical scenarios, wherein the clinician should consider using these drugs.</p>				
142.	<p>David, L. S., Beck, M. M., Kumar, M., Rajan, S. J., Danda, D. and Vijayaselvi, R. Obstetric and perinatal outcomes in pregnant women with takayasu's arteritis: Single centre experience over five years Journal of the Turkish German Gynecology Association; 2020, 21 (1): 15-23</p> <p>Address: Clinic of Obstetrics and Gynaecology, Christian Medical College and Hospital, Vellore, India Clinic of Neonatology, Christian Medical College and Hospital, Vellore, India Clinic of Obstetric Medicine, Christian Medical College and Hospital, Vellore, India Clinic of Rheumatology, Christian Medical College and Hospital, Vellore, India</p> <p>Objective: To study obstetric and perinatal outcomes among pregnant women with Takayasu arteritis (TA), attending our hospital for pregnancy and childbirth between January 2011 to December 2016. Material and Methods: Retrospective study was carried out by abstracting clinical charts on all pregnant women with TA who underwent antenatal care and/or delivery in our hospital during this period. American College of Rheumatology criteria was used for diagnosis of TA. Sixteen women with TA were included in the study. Maternal demographic data, stage of disease, complications related to disease, details of treatment taken prior to pregnancy, pregnancy outcomes, and neonatal outcomes were studied. Results: Forty-four percentage (7/16) belonged to type 5 angiographic type, however the same proportion (7/16) had undergone surgical corrections prior to pregnancy and the majority (15/16) were on medical management. Only three women (19%) were diagnosed during pregnancy. Most did not have active disease measured by</p>	INT	JAN TO JUN	Neonatology, Obstetric Medicine, Rheumatology	SCOPUS H-INDEX:12 IF: 1.000 RG (2018/2019)

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	Kerr's criteria (n=12; 75%), and Indian Takayasu clinical activity scores A. Chronic hypertension was the commonest antenatal complication (56.2%), nearly one-third had growth restricted babies and 25% had preterm labour. There were no cardiovascular events, no maternal deaths, nor fetal or neonatal deaths. Two-thirds of our women were delivered by caesarean section. Conclusion: Preconceptional counselling is of paramount importance in women with TA. Good maternal and fetal outcomes are observed with close antenatal surveillance and multidisciplinary care. Pregnancy should be planned during disease remission, with good antenatal care, close monitoring of clinical symptoms, early diagnosis and treatment of complications. © 2020 by the Turkish-German Gynecological Education and Research Foundation.				
143.	<p>David, S. M., Ragasudha, P. N., Taneja, S., Mohan, S. B., Iyengar, S. D., Pricilla, R. A., Martines, J., Sachdev, H. S., Suhalka, V., Mohan, V. R., Mazumder, S., Chowdhury, R., Bahl, R. and Bose, A.</p> <p>Predictors of recovery in children aged 6-59 months with uncomplicated severe acute malnutrition: a multicentre study Public Health Nutr; 2020, 1-9 Address: Department of Community Health, Christian Medical College, Vellore, TN, India. Centre for Health Research and Development, Society for Applied Studies, New Delhi, India. Sitaram Bhartia Institute of Science and Research, New Delhi, India. Action Research and Training for Health, Udaipur, Rajasthan, India. Centre for Intervention Science in Maternal and Child Health, Centre for International Health, University of Bergen, Bergen, Norway. Department of Maternal, Newborn, Child and Adolescent Health, World Health Organisation, Geneva, Switzerland.</p> <p>OBJECTIVE: To identify predictors of recovery in children with uncomplicated severe acute malnutrition (SAM). DESIGN: This is a secondary data analysis from an individual randomised controlled trial, where children with uncomplicated SAM were randomised to three feeding regimens, namely ready-to-use therapeutic food (RUTF) sourced from Compact India, locally prepared RUTF or augmented home-prepared foods, under two age strata (6-17 months and 18-59 months) for 16 weeks or until recovery. Three sets of predictors that could influence recovery, namely child, family and nutritional predictors, were analysed. SETTING: Rural and urban slum areas of three states of India, namely Rajasthan, Delhi and Tamil Nadu. PARTICIPANTS: In total, 906 children (age: 6-59 months) were analysed to estimate the adjusted hazard ratio (AHR) using the Cox proportional hazard ratio model to identify various predictors. RESULTS: Being a female child (AHR: 1.269 (1.016, 1.584)), better employment status of the child's father (AHR: 1.53 (1.197, 1.95)) and residence in a rental house (AHR: 1.485 (1.137, 1.94)) increased the chances of recovery. No hospitalisation (AHR: 1.778 (1.055, 2.997)), no fever,</p>	INT	JUL TO DEC	Community Health	PMID:33222710

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	(AHR: 2.748 (2.161, 3.494)) and ≤ 2 episodes of diarrhoea (AHR: 1.579 (1.035, 2.412)) during the treatment phase; availability of community-based peer support to mothers for feeding (AHR: 1.61 (1.237, 2.097)) and a better weight-for-height Z-score (WHZ) at enrolment (AHR: 1.811 (1.297, 2.529)) predicted higher chances of recovery from SAM. CONCLUSION: The probability of recovery increases in children with better WHZ and with the initiation of treatment for acute illnesses to avoid hospitalisation, availability of peer support and better employment status of the father.				
144.	<p>De Leon, J., Rajkumar, A., Kaithi, A., Schoretsanitis, G., Kane, J., Wang, C. Y., Tang, Y. L., Lin, S. K., Hong, K., Farooq, S., Ng, C., Ruan, C. J. and Andrade, C.</p> <p>Do asian patients require only half of the clozapine dose prescribed for caucasians? A critical overview</p> <p>Indian Journal of Psychological Medicine; 2020, 42 (1): 4-10</p> <p>Address: Mental Health Research Center, Eastern State Hospital, 1350 Bull Lea Road, Lexington, KY 40511, United States Psychiatry and Neurosciences Research Group (CTS-549), Institute of Neurosciences, University of Granada, Granada, Spain Biomedical Research Centre in Mental Health Net (CIBERSAM), Santiago Apóstol Hospital, University of the Basque Country, Vitoria, Spain Department of Psychiatry, Christian Medical College, Vellore, Tamil Nadu, India Institute of Mental Health, University of Nottingham, Nottingham, United Kingdom Hazelwood Center, Louisville, KY, United States Department of Psychiatry, Zucker Hillside Hospital, Northwell Health, Glen Oaks, NY, United States Department of Psychiatry and Molecular Medicine, Donald and Barbara Zucker School of Medicine at Hofstra/Northwell, Hempstead, NY, United States Department of Psychiatry, National Clinical Research Centre for Mental Disorders and Beijing Key Lab of Mental Disorders and Beijing Institute for Brain Disorders Center of Schizophrenia, Beijing Anding Hospital, Capital Medical University, Beijing, China Department of Psychiatry and Behavioral Sciences, Emory University School of Medicine, Atlanta, GA, United States Substance Abuse Treatment Program, Atlanta VA Medical Center, Decatur, GA, United States Department of General Psychiatry, Taipei City, Psychiatric Center, Taipei, Taiwan Department of Psychiatry, School of Medicine, Taipei Medical University, Taipei, Taiwan Department of Psychiatry, Sungkyunkwan University School of Medicine, Samsung Medical Center, Seoul, South Korea School of Primary, Community and Social Care, Faculty of Medicine and Health Sciences, Keele University, Staffordshire, United Kingdom Midlands Partnership NHS Foundation Trust, Staffordshire, United Kingdom</p>	NAT	JAN TO JUN	Psychiatry	<p>SCOPUS H-INDEX:20 IF: 0.470 RG (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Department of Psychiatry, Melbourne Clinic and St Vincent's Hospital, University of Melbourne, Melbourne, VIC, Australia Laboratory of Clinical Psychopharmacology and The National Clinical Research Centre for Mental Disorders and Beijing Key Lab of Mental Disorders, Beijing Anding Hospital, Capital Medical University, Beijing, China Department of Psychopharmacology, National Institute of Mental Health and Neurosciences, Bengaluru, Karnataka, India</p> <p>Since 1997, studies have found that Asians need lower clozapine doses than Caucasians. Caucasians with average clozapine metabolism may need from 300 to 600 mg/day to reach the therapeutic range (350 ng/ml). Thus, serum clozapine concentration-to-dose (C/D) ratios typically range between 0.60 (male smokers) and 1.20 (female non-smokers). A 2019 systematic review of clozapine levels demonstrated weighted mean C/D ratios of 1.57 in 876 East Asians and 1.07 in 1147 Caucasians (P <.001). In Asian countries, average clozapine doses are lower than 300 mg/day. After sex and smoking stratification in 5 Asian samples with clozapine concentrations, the clozapine dose required to reach 350 ng/ml in female non-smokers ranged from 145 to 189 mg/day and in male smokers, from 259 to 294 mg/day. Thus, in Asian patients with average metabolism (with no inducers other than smoking, with no inhibitors, and in the absence of extreme obesity), the dose needed for clinical response may range between 150 mg/day for female non-smokers to 300 mg/day for male smokers. Clozapine levels may help personalize dosing in clozapine poor metabolizers (PMs) and ultrarapid metabolizers (UMs). Asian PMs may need very low doses (50-150 mg/day) to obtain therapeutic concentrations. About 10% (range 2-13%) of Asians are genetic PM cases. Other PMs are patients taking CYP1A2 inhibitors such as fluvoxamine, oral contraceptives, and valproate. Temporary clozapine PM status may occur during severe systemic infections/inflammations with fever and C-reactive protein (CRP) elevations. Asian UMs include patients taking potent inducers such as phenytoin, and rarely, valproate. © 2020 Indian Psychiatric Society - South Zonal Branch IF: Published by Wolters Kluwer - Medknow.</p>				
145.	<p>Devanga Ragupathi, N. K., Muthuirulandi Sethuvel, D. P., Triplicane Dwarakanathan, H., Murugan, D., Umashankar, Y., Monk, P. N., Karunakaran, E. and Veeraraghavan, B.</p> <p>The Influence of Biofilms on Carbapenem Susceptibility and Patient Outcome in Device Associated K. pneumoniae Infections: Insights Into Phenotype vs Genome-Wide Analysis and Correlation Front Microbiol; 2020, 11 591679 Address: Sheffield Collaboratorium for Antimicrobial Resistance and Biofilms (SCARAB), The University of Sheffield, Sheffield, United Kingdom. Department of Chemical and Biological Engineering, The University of Sheffield, Sheffield, United Kingdom. Department of Clinical Microbiology, Christian Medical College, Vellore, India.</p>	INT	JUL TO DEC	Clinical Microbiology, Orthopaedics	PMID: 33381089 PMC:7767932

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Department of Orthopaedics, Christian Medical College, Vellore, India. Department of Infection, Immunity and Cardiovascular Disease, The University of Sheffield, Sheffield, United Kingdom.</p> <p>Klebsiella pneumoniae is one of the leading causes of nosocomial infections. Carbapenem-resistant K. pneumoniae are on the rise globally. The biofilm forming ability of K. pneumoniae further complicates patient management. There is still a knowledge gap on the association of biofilm formation with patient outcome and carbapenem susceptibility, which is investigated in present study. K. pneumoniae isolates from patients admitted in critical care units with catheters and ventilators were included. K. pneumoniae (n = 72) were subjected to 96-well plate biofilm formation assay followed by MBEC assay for subset of strong biofilm formers. Whole genome sequencing and a core genome phylogenetic analysis in comparison with global isolates were performed. Phenotypic analyses showed a positive correlation between biofilm formation and carbapenem resistance. Planktonic cells observed to be susceptible in vitro exhibited higher MICs in biofilm structure, hence MICs cannot be extrapolated for treatment. The biofilm forming ability had a significant association with morbidity/mortality. Infections by stronger biofilm forming pathogens significantly (p < 0.05) resulted in fewer "average days alive" for the patient (3.33 days) in comparison to those negative for biofilms (11.33 days). Phylogenetic analysis including global isolates revealed clear association of sequence types with genes for biofilm formation and carbapenem resistance. Known hypervirulent clone-ST23 with wcaG, magA, rmpA, rmpA2, and wzc with lack of mutation for hyper-capsulation might be poor biofilm formers. ST15, ST16, ST307, and ST258 (reported global high-risk clones) were wcaJ negative indicating the high potential of biofilm forming capacity. Genes wabG and treC for CPS, bcsA and pgaC for adhesins, luxS for quorum sensing were common in all clades in addition to genes for aerobactin (iutA), allantoin (allS), type I and III fimbriae (fimA, fimH, and mrkD) and pili (pilQ and ecpA). This study is the first of its kind to compare genetic features of antimicrobial resistance with a spectrum covering most of the genetic factors for K. pneumoniae biofilm. These results highlight the importance of biofilm screening to effectively manage nosocomial infections by K. pneumoniae. Further, data obtained on epidemiology and associations of biofilm and resistance genetic factors will serve to enhance our understanding on biofilm mechanisms in K. pneumoniae.</p>				
146.	<p>Devanga Ragupathi, N. K., Vasudevan, K., Venkatesan, M. and Veeraraghavan, B. First Indian report on B4/H24RxC ST410 multidrug-resistant Escherichia coli from bloodstream infection harbouring bla(OXA-181) and bla(CTX-M-15) J Glob Antimicrob Resist; 2020, 22 568-570 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. OBJECTIVES: Escherichia coli is regarded as one of the most commonly isolated</p>	INT	JUL TO DEC	Clinical Microbiology	PMID: 32603904

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Gram-negative pathogens from bloodstream infections. Increasing antimicrobial resistance (AMR) among E. coli is a threat to disease management as well as further dissemination of AMR genes to other clinically important pathogens. Here we report the genome of a multidrug-resistant (MDR) E. coli (BA22372) from a bloodstream infection belonging to ST410 B4/H24RxC subtype from India. METHODS: Genomic DNA of E. coli BA22372 was sequenced using Ion Torrent™ PGM™ and MinION™ sequencing. Hybrid genome assembly was performed using short and long reads from both methods to achieve accurate and complete genome data. RESULTS: Here we report the genome of MDR E. coli BA22372 harbouring bla(OXA-181) and bla(CTX-M-15) in two individual plasmids, namely pOXA181_22372 (IncX3) and pCTX-M-15_22372 (IncF). The pCTX-M-15 plasmid is well known to co-harbour bla(NDM-5), which was not seen in the studied isolate here. CONCLUSION: To the best of our knowledge, this is the first report of B4/H24RxC MDR E. coli from India co-harbouring bla(CTX-M-15) and bla(OXA-181) along with other AMR genes. Information from this genome data revealed the possession of AMR genes in two individual plasmids and their potential for rapid dissemination. This isolate is of high health concern as it harbours a plasmid with replicatory mechanisms capable of acquiring bla(NDM-5), which is a great threat for rapid dissemination of AMR. This study enhances our understanding of the AMR mechanisms among different clones of E. coli.				
147.	Devasia, A. J., Abraham, M. A., Sagadevan, C., Korula, A., Kulkarni, U., Fouzia, N. A., Abraham, A., Srivastava, A., Mathews, V., George, S. P. and George, B. Safety of peripheral blood stem cell harvest in children under anaesthesia in the day care setting - A single centre experience Transfus Apher Sci; 2020, 102962 Address: Department of Haematology, Christian Medical College, Vellore, India. Electronic Address: dranupjdevasia@gmail.com. Department of Anaesthesia, Christian Medical College, Vellore, India. Department of Haematology, Christian Medical College, Vellore, India. The use of cytokine mobilized peripheral blood stem cells (PBSC) for stem cell transplantation offers early engraftment, and less early transplant related mortality and morbidity. This can be done easily in the out-patient setting in an adult donor, but is difficult in children. The safety and efficacy of general anaesthesia outside the controlled operation room setting is quite challenging and demanding. We present our experience with paediatric PBSC harvest done under anaesthesia in the out-patient setting between January 2009 to June 2017. A total of 158 children underwent 164 PBSC harvests during the study period. Donors were predominantly females with a median age of 5 years (1-12) and a median weight of 17.5 kg (9.4-51). In 50% of the cases, induction of anaesthesia was by sevoflurane followed by total intravenous anaesthesia (TIVA) while in 32% it was sevoflurane induction followed by sedation. Hudson mask (48.5%) and laryngeal mask airway (50%) were the most common modes of airway and all patients were ventilated in the spontaneous mode. Propofol was the most commonly used	INT	JUL TO DEC	Haematology, Anaesthesia	PMID: 33051092

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>maintenance agent (67%). There were no major complications except for acute pulmonary edema secondary to infusion of blood products requiring a short stay in ICU for one donor. All donors were discharged on the next day of harvest. No long term complications have been reported in any of these donors. Paediatric PBSC harvest can be safely done under anaesthesia with due precautions in the day care setting.</p>				
148.	<p>Devasia, A. J., Illangeswaran, R. S. S., Raj, I. X., George, B. and Balasubramanian, P. NUDT15 polymorphism explains serious toxicity to azathioprine in Indian patients with chronic immune thrombocytopenia and autoimmune hemolytic anemia: a case series Drug Metab Pers Ther; 2020, 35 (4): Address: Department of Haematology, Christian Medical College, Vellore, India. Objectives Azathioprine (AZA) is a commonly used immunosuppressant in patients with autoimmune diseases. The toxic side effect to AZA (myelosuppression, hair loss, and oral ulcers) are highly unpredictable which can be life threatening if not identified earlier and dose adjustments made or the drug is withdrawn. Case presentation Here we report a case series of five patients with severe toxicity while on treatment with AZA for autoimmune hemolytic anemia (n=1) and Immune thrombocytopenia (n=4). The common thiopurine methyltransferase (TPMT) variants (TPMT*2, *3A, *3B) were not present in these patients. However, all these patients had the NUDT15 415C>T variant that has been reported to explain serious toxicity to thioguanine in Asian patients. Conclusions Our report suggests pre-emptive genotype-based dosing of AZA could reduce adverse toxicity and hence better outcome.</p>	INT	JUL TO DEC	Haematology	PMID: 32827393
149.	<p>Devi, Y. D., Devi, A., Gogoi, H., Dehingia, B., Doley, R., Buragohain, A. K., Singh, C. S., Borah, P. P., Rao, C. D., Ray, P., Varghese, G. M., Kumar, S. and Namsa, N. D. Exploring rotavirus proteome to identify potential B- and T-cell epitope using computational immunoinformatics Heliyon; 2020, 6 (12): Address: Department of Molecular Biology and Biotechnology, Tezpur University, NapaamAssam 784 028, India Department of Biotechnology, Royal Global University, Guwahati, India Department of Paediatrics, Regional Institute of Medical Sciences, Imphal, India Department of Paediatrics and Neonatology, Pratiksha Hospital, Guwahati, India School of Liberal Arts and Basic Sciences, SRM University AP, Amaravati, India Department of Biotechnology, Jamia Hamdard, Delhi, India Department of Infectious Diseases, Christian Medical College, Vellore, India Department of Biosciences and Bioengineering, Indian Institute of Technology, Guwahati, India Rotavirus; immune epitope; structural proteins; non-structural proteins. © 2020 The Authors Rotavirus is the most common cause of acute gastroenteritis in infants and children worldwide. The functional correlation of B- and T-cells to long-lasting immunity against rotavirus infection in the literature is limited. In this work, a series of computational immuno-informatics approaches were applied and</p>	INT	JUL TO DEC	Infectious Disease	SCOPUS

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>identified 28 linear B-cells, 26 conformational B-cell, 44 TC cell and 40 TH cell binding epitopes for structural and non-structural proteins of rotavirus. Further selection of putative B and T cell epitopes in the multi-epitope vaccine construct was carried out based on immunogenicity, conservancy, allergenicity and the helical content of predicted epitopes. An in-silico vaccine constructs was developed using an N-terminal adjuvant (RGD motif) followed by TC and TH cell epitopes and B-cell epitope with an appropriate linker. Multi-threading models of multi-epitope vaccine construct with B- and T-cell epitopes were generated and molecular dynamics simulation was performed to determine the stability of designed vaccine. Codon optimized multi-epitope vaccine antigens was expressed and affinity purified using the E. coli expression system. Further the T cell epitope presentation assay using the recombinant multi-epitope constructs and the T cell epitope predicted and identified in this study have not been investigated. Multi-epitope vaccine construct encompassing predicted B- and T-cell epitopes may help to generate long-term immune responses against rotavirus. The computational findings reported in this study may provide information in developing epitope-based vaccine and diagnostic assay for rotavirus-led diarrhea in children's. © 2020 The Authors</p>				
150.	<p>Diener, H. C., Akagi, T., Durongpisitkul, K., Thomson, V. S., Prabhakar, A. T., Sharpe, R., Albers, B., Lewalter, T., Oki, K. and Sharma, V. K. Closure of the patent foramen ovale in patients with embolic stroke of undetermined source: A clinical expert opinion and consensus statement for the Asian-Pacific region Int J Stroke; 2020, 15 (9): 937-944 Address: Faculty of Medicine, University Duisburg-Essen, Essen, Germany. Department of Cardiology, Okayama University, Okayama, Japan. Faculty of Medicine, Siriraj Hospital, Mahidol University, Bangkok, Thailand. Department of Cardiology, Christian Medical College, Vellore, India. Department of Neurological Sciences, Christian Medical College, Vellore, India. Cardiology, Sharpe Cardiology, Southport, Australia. Albers Clinical Evidence Consultancy, Winterswijk Woold, the Netherlands. Department of Cardiology and Intensive Care, Peter Osypka Heart Center, Munich, Germany. Department of Neurology, Tokyo Saiseikai Central Hospital, Tokyo, Japan. Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore. Division of Neurology, Department of Medicine, National University Hospital, Singapore, Singapore. Recently published long-term data from randomized controlled trials have provided evidence for the prevention of recurrent embolic stroke of undetermined source by percutaneous closure of the patent foramen ovale. However, most data were obtained from Caucasian populations and evidence on patent foramen ovale closure in Asian-Pacific patients is limited. The relative paucity in clinical data from</p>	INT	JUL TO DEC	Cardiology, Neurological Sciences	PMID: 32677579

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>this population, as well as the fact that Asian-Pacific patients may have higher bleeding risks than Caucasians, complicates clinical decision-making. This document, resulting from a consensus meeting of Asian-Pacific clinical experts, states the consensus among these experts about how to treat Asian-Pacific patients who had an embolic stroke of undetermined source and have a patent foramen ovale, based on currently available evidence and expert opinions. In addition, uncertainties and the need for clinical data regarding patent foramen ovale closure for prevention of recurrent embolic stroke of undetermined source in general, and specifically for Asian-Pacific patients, are identified.</p>				
151.	<p>Divakar, T. K., Gidean Arularasan, S., Baskaran, M., Packiaraj, I. and Dhineksh Kumar, N. Clinical Evaluation of Placement of Implant by Flapless Technique Over Conventional Flap Technique J Maxillofac Oral Surg; 2020, 19 (1): 74-84</p> <p>Address: Department of Oral and Maxillofacial Surgery, Rajas Dental College and Hospital, Tirunelveli, India. 2Department of Dental and Oral surgery, Unit -II, Christian Medical College and Hospital, Vellore, India. GRID: grid.11586.3b. ISNI: 0000 0004 1767 8969 Gem Head and Neck Hospital, Palayamkottai, Tirunelveli, India.</p> <p>AIM: The aim of this study was to compare the clinical advantages of flapless implant surgery over conventional flap technique of implant placement by assessing the marginal bone loss in 1 month, 2 months and 3 months postoperatively, pain assessment, number of analgesics taken by the patients postoperatively and the postoperative swelling between two groups. MATERIALS AND METHODS: This study was conducted at Department of Oral and Maxillofacial Surgery, Rajas Dental College and Hospital, Tirunelveli. The patients were assigned randomly to one of the two groups-flap (ten patients) or flapless (ten patients). Digital IOPARs were taken postoperatively. The parameters assessed were marginal bone loss (interproximal bone height), pain assessment by a 10-cm visual analog scale, swelling assessment by modification of tape measuring method by Gabka and Matsumara and the number of analgesics tablets taken every postoperative day from the day of surgery to 6 days after surgery. RESULTS AND STATISTICS: Descriptive statistics was done by calculating measures of central tendency (mean) and measures of dispersion (standard deviation) for all the parameters. Inferential statistics were done by unpaired Student's t test to compare the mean difference between the two groups. The results of this study showed that the mean difference in the bone loss for baseline to the third month for the flap group was 0.34 ± 0.05 and for the flapless group was 0.03 ± 0.004 ($p = 0.000$H-INDEX:H-INDEX:H-INDEX:). Pain assessment by visual analog scale was statistically significant in all the 5 postoperative days indicating a better patient compliance in the flapless group and there was no statistical difference in</p>	NAT	JAN TO JUN	Dental and Oral Surgery Unit II	PMID:31988568 PMC ID: PMC6954945 SCOPUS H-INDEX:18 IF: 1.781 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	the level of swelling between these two groups. CONCLUSION: Within the limitations of this study, it can be concluded that flapless implant surgery results in lesser loss of marginal bone and also results in better patient comfort; however, proper patient selection and technique is essential for a successful flapless implant surgery.				
152.	<p>Doss, S. A., Mittal, S. and Daniel, D. Impact of rituximab on the T-cell flow cytometric crossmatch Transpl Immunol; 2020, 64 101360 Address: Department of Transfusion medicine & Immunohaematology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Transfusion medicine & Immunohaematology, Christian Medical College, Vellore, Tamil Nadu, India. Electronic Address: hlaclinpath@cmcvellore.ac.in.</p> <p>Rituximab is frequently used in the setting of ABO-incompatible renal transplants, and highly sensitized patients. Its interference with B-cell flow cytometric crossmatch (B-FCXM) is well known. However, its effect on the T-cell flow cytometric crossmatch (T-FCXM) has not been described. We aimed to evaluate the effect of rituximab on the T-FCXM using non-pronase and pronase treated donor lymphocytes and compare results with the single antigen bead (SAB) assay. In this retrospective study, 28 patients on rituximab therapy were evaluated against 30 donors. Using non-pronase treated donor lymphocytes, all 30 FCXMs showed strong B-cell positivity {median (IQR) B-cell ratio: 184.65 (253.17)} which significantly reduced {1.0 (1.18); $p < 0.00001$} with pronase treatment. 'T-cell tailing' phenomenon was observed in 17/30 FCXMs in the non-pronase group as a 'tail of T-cells', indicating a rare sub-population. However, it disappeared in the pronase-treated group. SAB assay did not show donor-specific antibodies (DSA) in all 17 patients with 'T-cell tailing' phenomenon. Although, rituximab is described to impact only B-FCXM, we have consistently found 'T-cell tailing' in 57% of T-FCXMs, which clears with pronase treatment. The 'T-cell tailing' led to weak positive T-FCMX ratios due to increased MFI in the FL1 channel. However, the absence of DSA in all recipients reinforces the fact that this is a false positive finding and should not be misconstrued as a possible class I DSA. Structural homology of Fc receptors on activated T-cells to CD20 could be a possible explanation of the same and provide insight into a novel mechanism of action of rituximab.</p>	INT	JUL TO DEC	Transfusion medicine & Immunohaematology	PMID: 33359130
153.	<p>Dover, S., Blanchette, V. S., Srivastava, A., Fischer, K., Abad, A. and Feldman, B. M. Clinical outcomes in hemophilia: Towards development of a core set of standardized outcome measures for research Res Pract Thromb Haemost; 2020, 4 (4): 652-658 Address: Child Health Evaluative Sciences The Hospital for Sick Children Toronto ON Canada. Division of Hematology/Oncology The Hospital for Sick Children Toronto ON Canada. Department of Pediatrics University of Toronto Toronto ON Canada.</p>	INT	JUL TO DEC	Hematology	PMID:32548565 PMC ID:7292657

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Department of Hematology Christian Medical College Vellore India. Van Creveldkliniek University Medical Center Utrecht Utrecht The Netherlands. Institute of Health Policy Management & Evaluation the Dalla Lana School of Public Health University of Toronto Toronto ON Canada. Division of Rheumatology The Hospital for Sick Children Toronto ON Canada.</p> <p>INTRODUCTION: A lack of uniformity in the choice of outcome measurement in hemophilia care and research has led to studies with incomparable results. We identified a need to define core outcome measures for use in research and clinical care of persons with hemophilia. OBJECTIVE: To move toward a core set of outcome measures for the assessment of persons with hemophilia in research and practice. METHODS: A modified nominal groups process was conducted with an international group of hemophilia experts, including persons with hemophilia as follows. Step 1: item generation for all potential outcome measures. Step 2: survey where respondents voted on the relative importance and usefulness of each item. Steps 3/4: 2-day meeting where attendees voted for items they valued, followed by open discussion and a second round of voting. Step 5: survey where respondents selected their top five items from those with >50% agreement at the meeting. RESULTS: The highest ranked items for the pediatric core set (% agreement) are treatment satisfaction (92.7%), joint health (83.3%), a measure of access to treatment (82.5%), a measure of treatment adherence (72.5%), and generic performance based physical function (72.1%). The highest ranked items for the adult core set (% agreement) are total bleeding events (88.1%), EuroQol five dimensions (85.4%), treatment adherence (82.1%), joint health (79.1%), and number/location of bleeds per unit time (78.6%). CONCLUSION: This process generated a list of preferred outcome measures to consider for assessment in persons with hemophilia. This information now requires refinement to define optimal core sets for use in different clinical/research contexts.</p>				
154.	<p>Dsouza, R. J., Premkumar, P., Samuel, V., Kota, A. and Agarwal, S. Patterns of arterial involvement and feasibility of revascularization in thromboangiitis obliterans: a tertiary care centre experience ANZ J Surg; 2020, 90 (12): 2506-2509 Address: Department of Vascular Surgery, Christian Medical College Hospital, Vellore, India. BACKGROUND: Arterial revascularization is seldom considered as a treatment option in thromboangiitis obliterans (TAO) due to diffuse segmental involvement of medium- and small-sized extremity vessels. Although typical angiographic features include bilaterally symmetrical involvement of infrapopliteal vessels, larger vessels too can be affected. Similarly, there could be distal target vessels feasible for revascularization. This study was conducted to describe the patterns of arterial involvement in TAO and assess the feasibility of revascularization. METHODS: The study was approved by the Institutional Review Board and research ethics committee of Christian Medical College, Vellore (IRB no: 12034).</p>	INT	JUL TO DEC	Vascular Surgery	PMID: 33176048

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	A retrospective study was conducted in the Department of Vascular Surgery, Christian Medical College, Vellore , India, between January 2009 and December 2018. There were 329 patients who fulfilled the clinical criteria for TAO of whom 83 had an angiogram done. These 83 patients formed the study cohort. RESULTS: Large vessel involvement was seen in 56.6% of patients and 79.5% of patients had at least one or more distal target artery feasible for revascularization. The anterior tibial artery and peroneal artery were the most common target vessels that were patent for revascularization. Of the 22 patients who underwent revascularization (16 bypasses and six angioplasties), the patency rate was 64.8% and the limb salvage rate was 80.9% at the end of 6 months. CONCLUSION: The study shows that one-third of our patients with TAO have a distal target artery feasible for revascularization. As most of the affected patients are in the economically productive age group, every attempt should be made to salvage the limb with revascularization for which the use of angiography should be more liberal.				
155.	Dsouza, R., Kota, A. A., Agarwal, S. and Issac, R. Cervical sympathetic schwannoma: a forgotten differential for Horner's syndrome Anz Journal of Surgery; 2020, 90 (4): 638-640 Address: [Dsouza, Royson; Kota, Albert A.; Agarwal, Sunil] Christian Med Coll & Hosp , Dept Vasc Surg, Vellore , Tamil Nadu, India. [Issac, Rijo] Christian Med Coll & Hosp , Dept Pathol, Vellore , Tamil Nadu, India. Dsouza, R (reprint author), Christian Med Coll & Hosp , Dept Vasc Surg, Vellore , Tamil Nadu, India.	INT	JAN TO JUN	Vascular Surgery, Pathology	WOS:000528770300079 SCOPUS H-INDEX:67 IF: 1.605 BIOXBIO (2018/2019)
156.	Dsouza, R., Kota, A. A., Jain, S. and Agarwal, S. Mycotic abdominal aortic aneurysm complicated by infective spondylitis due to Pseudomonas aeruginosa BMJ Case Rep; 2020, 13 (2): Address: Department of Vascular Surgery, Christian Medical College Vellore, Vellore , India. Department of Vascular Surgery, Christian Medical College Vellore, Vellore , India albertkota@cmcvellore.ac.in. A 67-year-old man with diabetes and hypertension presented with complaints of abdominal pain and lower backache for 7 months, with intermittent episodes of fever. On examination, there was an expansile mass in the upper abdomen with bruit on auscultation. He also had tenderness in the L1-L2 vertebral space with paraspinal fullness, causing painful restriction of lower limb motor functions but without affecting sensation. On evaluation, he was found to have an abdominal aortic aneurysm with infective lumbar spondylodiscitis. The aspirate from the paravertebral infected tissue and cultures from blood grew Pseudomonas aeruginosa, a rare causative agent of mycotic aortic aneurysm. Whether the infective spondylitis spread to the abdominal aorta causing the mycotic aneurysm or vice versa is a dilemma in such a case. However, the mainstay of treatment	INT	JAN TO JUN	Vascular Surgery	PMID:32051162 PMC ID: PMC7035837 SCOPUS H-INDEX:22 IF: 0.440 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	remains adequate source control and repair of the aneurysm with appropriate antibiotic therapy. Our patient received intravenous antibiotics for P . aeruginosa based on sensitivity, following which he underwent debridement of the infective spondylodiscitis with aneurysmorrhaphy. He had an uneventful recovery and was well at 3-month follow-up.				
157.	<p>Dsouza, R., Varghese, G., Korula, D. R. and Dutta, A. K. Crohn's disease associated adenocarcinoma of ileocaecal region: a miscalculated approach BMJ Case Rep; 2020, 13 (4): Address: Department of General Surgery, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. Department of General Surgery & Colorectal Surgery, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India gigivargh@gmail.com. Department of Radiodiagnosis, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. Department of Gastroenterology and Hepatology, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India.</p> <p>Adenocarcinoma of the bowel is a dreadful sequelae of inflammatory bowel disease that can be difficult to diagnose and has been shown to have poor prognosis. The diagnosis is often made on histopathological examination of the resected specimen for what is suspected to be an exacerbation of the underlying intestinal Crohn's. A 39-year-old woman who was being treated for small bowel Crohn's disease for 4 years presented with features of intermittent intestinal obstruction that was refractory to medical therapy. A contrast CT of the abdomen was suggestive of ileocaecal Crohn's disease, and colonoscopy revealed a stricture at proximal transverse colon with multiple superficial ulcers. She underwent a mesentery sparing right hemicolectomy and had an uneventful recovery. The biopsy, however, was reported to be moderately differentiated adenocarcinoma stage T3N0 with a harvest of four pericolic nodes. Adjuvant chemotherapy was advised, which she deferred. Ten months later, she presented to the emergency room with features of intestinal obstruction. Contrast CT of the abdomen showed thickening at the anastomotic site with intestinal obstruction. On exploratory laparotomy, tumour recurrence was noted at the site of the anastomosis and diffuse peritoneal metastasis. A palliative diversion ileostomy was done due to inoperable obstructing disease. She was then given palliative therapy and subsequently succumbed to the illness. The inclusion of mesentery with the resected specimen in Crohn's disease has been a debate over many years. Since the preoperative diagnosis of carcinoma of the bowel in Crohn's disease is challenging, all ileocolic resections should be radical as done in oncological resections. This would yield better oncological safety and may improve survival rates.</p>	INT	JAN TO JUN	General Surgery, Coleretal Surgery, Radiodiagnosis, Gastroenterology and Hepatology	PMID:32303529 PMC ID: PMC7199119 SCOPUS H-INDEX:22 IF: 0.440 BIOXBIO (2018/2019)
158.	<p>Dsouza, R., Varghese, G., Mittal, R. and Ranjan Jesudason, M. Perineal wound outcomes after extralevator abdominoperineal excision for rectal</p>	INT	JAN TO JUN	Colorectal Surgery	SCOPUS H-INDEX:10

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>adenocarcinoma—A tertiary care centre experience Wound Medicine; 2020, 29 Address: Department of Colorectal Surgery, Christian Medical College Hospital, Vellore, Tamilnadu 632004, India</p> <p>Extralevator Abdominoperineal excision (ELAPE) for low rectal cancer results in a large perineal defect, often requiring reconstruction by a biological or absorbable mesh or a flap as compared to conventional Abdominoperineal excision (CAPE). Although there are indications for oncological superiority with ELAPE, the incidence of wound-related complications is postulated to be higher when compared to APE due to the removal of more amount of tissue around the anorectum. On the other hand, the incidence of inadvertent rectal tube perforation during dissection is lesser in ELAPE and hence perineal wound breakdown and infection are postulated to be lesser in some other studies. We conducted a retrospective study in the department of colorectal surgery, Christian Medical College; Vellore from 2011 to 2017 to compare the perineal wound-related complications following CAPE and ELAPE. The data were retrieved from the prospectively maintained computerized inpatient and out-patient follow up records and comparisons were made in terms of incidence of perineal wound outcomes, need for reoperations and duration of hospital stay. A total of 138 patients underwent CAPE and 57 patients underwent ELAPE over a period of 7 years. There was no statistical difference in baseline characteristics and patients who underwent neo-adjuvant chemoradiation between the two groups. Perineal wound complications were seen in 63 % (87) of the patients after CAPE compared to 64.9 % (37) of the patients after ELAPE. There was no perineal herniation or wound dehiscence following ELAPE, whereas these complications occurred in 1 and 5 patients respectively after CAPE. Similarly, the incidence of reoperations was 8% in CAPE as compared to 5.4 % in ELAPE although not statistically significant. There was no difference in the length of hospital stay. Hence, in our experience, perineal wound complications were similar in the Extralevator approach to APE (ELAPE) as compared to conventional APE (CAPE) for rectal adenocarcinoma. © 2020 Elsevier GmbH</p>				IF: 0.670 BIOXBIO (2018/2019)
159.	<p>Duffy, J. M. N., Alahwany, H., Bhattacharya, S., Collura, B., Curtis, C., Evers, J. L. H., Farquharson, R. G., Franik, S., Giudice, L. C., Khalaf, Y., Knijnenburg, J. M. L., Leeners, B., Legro, R. S., Lensen, S., Vazquez-Niebla, J. C., Mavrelos, D., Mol, B. W. J., Niederberger, C., Ng, E. H. Y., Otter, A. S., Puscasiu, L., Rautakallio-Hokkanen, S., Repping, S., Sarris, I., Simpson, J. L., Strandell, A., Strawbridge, C., Torrance, H. L., Vail, A., Van Wely, M., Vercoe, M. A., Vuong, N. L., Wang, A. Y., Wang, R., Wilkinson, J., Youssef, M. A., Farquhar, C. M., Abou-Setta, A. M., Aguilera, J. J., Atanda, O. O. A., Balkenende, E. M. E., Barnhart, K. T., Beebeejaun, Y., Mctavish, A. R., Black, M., Bofill, M., Jordan, V., Showell, M., Chambers, G. M., Chughtai, A. A., Crosby, J. A., Schwarze, J. E., Cuevas-Saiz, I., D'angelo, A., Dubois, D. D., Duckitt, K., Encinas, C., Fincham, A., Gerval, M. O., Giang, N. H., Le, T. K., Nguyen, D. T. P., Tran, C. T., Gibreel, A., Gingel, L.</p>	INT	JUL TO DEC	Reproductive Medicine	SCOPUS

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>J., Perez, M. J., Mills, D. J., Marks, K. L., Glanville, E. J., Glujovsky, D., Granne, I., Griesinger, G., Gupta, D., Hamzehgardeshi, Z., Hickey, M., Hirsch, M., Horton, M., Hull, M. L., Jain, S., Jones, C. A., Shapiro, H. M., Kamath, M. S., Kostova, E., La Marca, A., Leader, A., Li, J., Loto, O. M., Nair, R. R., Pacey, A. A., Sadler, L. C., Sagle, P., Siristatidis, C. S., Sood, A., Votteler, E. L., Wang, C. C., Watson, A., Yossry, M. and Core Outcome Measure for Infertility Trials, Initiative</p> <p>Developing a core outcome set for future infertility research: An international consensus development study</p> <p>Human Reproduction; 2020, 35 (12): 2725-2734</p> <p>Address: King's Fertility, Fetal Medicine Research Institute, London, United Kingdom</p> <p>Institute for Women's Health, University College London, London, United Kingdom</p> <p>School of Medicine, University of Nottingham, Derby, United Kingdom</p> <p>School of Medicine, Medical Sciences and Nutrition, University of Aberdeen, United Kingdom</p> <p>RESOLVE: The National Infertility AssociationVA, United States</p> <p>Fertility New Zealand, Auckland, New Zealand</p> <p>School of Psychology, University of Waikato, Hamilton, New Zealand</p> <p>Maastricht University Medical Centre, Maastricht, Netherlands</p> <p>Department of Obstetrics and Gynaecology, Liverpool Women's NHS Foundation Trust, Liverpool, United Kingdom</p> <p>Department of Obstetrics and Gynaecology, Münster University Hospital, Münster, Germany</p> <p>Center for Research, Innovation and Training in Reproduction and Infertility, Center for Reproductive Sciences, University of California, San Francisco, CA, United States</p> <p>International Federation of Fertility Societies, Philadelphia, PA, United States</p> <p>Department of Women and Children's Health, King's College London, Guy's Hospital, London, United Kingdom</p> <p>Freya Dutch Infertility Association, Gorinchem, Netherlands</p> <p>Department of Reproductive Endocrinology, University Hospital Zurich, Zurich, Switzerland</p> <p>Department of Obstetrics and Gynaecology, Penn State College of MedicinePA, United States</p> <p>Department of Obstetrics and Gynaecology, University of MelbourneVIC, Australia</p> <p>Cochrane Iberoamerica, Biomedical Research Institute Sant Pau, Barcelona, Spain</p> <p>Reproductive Medicine Unit, University College Hospital, London, United Kingdom</p> <p>Department of Obstetrics and Gynaecology, Monash University, Melbourne, Australia</p> <p>Department of Urology, University of Illinois at Chicago, College of Medicine, Chicago, IL, United States</p> <p>Department of Obstetrics and Gynaecology, The University of Hong Kong, Hong Kong, Hong Kong</p> <p>Shenzhen Key Laboratory of Fertility Regulation, The University of Hong Kong-</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Shenzhen Hospital, China</p> <p>Osakidetza OSI, Bilbao, Basurto, Spain</p> <p>University of Medicine, Pharmacy, Sciences and Technology, Targu Mures, Romania</p> <p>Fertility Europe, Evere, Belgium</p> <p>Center for Reproductive Medicine, Amsterdam Reproduction and Development Institute, Amsterdam University Medical Centers, Amsterdam, Netherlands</p> <p>Department of Human and Molecular Genetics, Florida International UniversityFL, United States</p> <p>Department of Obstetrics and Gynecology, Sahlgrenska Academy, University of Gothenburg, Göteborg, Sweden</p> <p>Fertility Network UK, London, United Kingdom</p> <p>Department of Reproductive Medicine, University Medical Centre Utrecht, Utrecht, Netherlands</p> <p>Centre for Biostatistics, University of Manchester, Manchester Academic Health Science Centre, Manchester, United Kingdom</p> <p>Cochrane Gynaecology and Fertility Group, University of Auckland, Auckland, New Zealand</p> <p>Department of Obstetrics and Gynaecology, University of Medicine and Pharmacy in Ho Chi Minh City, Ho Chi Minh City, Viet Nam</p> <p>Faculty of Health, University of Technology, Sydney, Broadway, Australia</p> <p>Department of Obstetrics and Gynaecology, Faculty of Medicine, Cairo University, Cairo, Egypt</p> <p>University of Manitoba, Canada</p> <p>Argentina</p> <p>Ladoke Akintola University of Technology Teaching Hospital, Nigeria</p> <p>University of Amsterdam, Netherlands</p> <p>University of Pennsylvania, United States</p> <p>University of Aberdeen, United Kingdom</p> <p>New Zealand</p> <p>University of Auckland, New Zealand</p> <p>University of New South Wales, Australia</p> <p>Clinica Las Condes, Chile</p> <p>Hospital General Universitario de Valencia, Spain</p> <p>Wales Fertility Institute, United Kingdom</p> <p>Ottawa Fertility Centre, Canada</p> <p>University of British Columbia, Canada</p> <p>Geneva Foundation for Medical Education and Research, Bolivia</p> <p>Fertility Europe, Belgium</p> <p>Chelsea and Westminster Hospital NHS Foundation Trust, United Kingdom</p> <p>Viet Nam</p> <p>Mansoura University, Egypt</p> <p>United Kingdom</p> <p>Fertility Plus, National Women's Hospital, New Zealand</p> <p>CEGYR Medicina Reproductiva, Argentina</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>University of Oxford, United Kingdom University Hospital of Schleswig-Holstein, Germany Repromed, New Zealand Mazandaran University of Medical Sciences, Iran University of Melbourne, Australia University College London Hospitals, United Kingdom Pregna Reproductive Medicine, Argentina University of Adelaide, Australia Dreamz IVF, India University of Toronto, Canada Christian Medical College, Vellore, India Cochrane Gynaecology and Fertility, Netherlands University Hospital of Modena, Italy Ottawa Hospital Research Institute, Canada Chinese University of Hong Kong, Hong Kong Obafemi Awolowo University, Nigeria Mitera Hospital, India University of Sheffield, United Kingdom Auckland District Health Board, New Zealand University of Alberta, Canada Greece St. Mary's Hospital, United Kingdom Bath Fertility Centre, United Kingdom The Chinese University of Hong Kong, Hong Kong Tameside Foundation Trust, United Kingdom City Hospital Sunderland, United Kingdom</p> <p>STUDY QUESTION: Can a core outcome set to standardize outcome selection, collection and reporting across future infertility research be developed? SUMMARY ANSWER: A minimum data set, known as a core outcome set, has been developed for randomized controlled trials (RCTs) and systematic reviews evaluating potential treatments for infertility. WHAT IS KNOWN ALREADY: Complex issues, including a failure to consider the perspectives of people with fertility problems when selecting outcomes, variations in outcome definitions and the selective reporting of outcomes on the basis of statistical analysis, make the results of infertility research difficult to interpret. STUDY DESIGN, SIZE, DURATION: A three-round Delphi survey (372 participants from 41 countries) and consensus development workshop (30 participants from 27 countries). PARTICIPANTS/MATERIALS, SETTING, METHODS: Healthcare professionals, researchers and people with fertility problems were brought together in an open and transparent process using formal consensus science methods. MAIN RESULTS AND THE ROLE OF CHANCE: The core outcome set consists of: viable intrauterine pregnancy confirmed by ultrasound (accounting for singleton, twin and higher multiple pregnancy); pregnancy loss (accounting for ectopic pregnancy, miscarriage, stillbirth and termination of pregnancy); live birth; gestational age at</p>				

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	<p>delivery; birthweight; neonatal mortality; and major congenital anomaly. Time to pregnancy leading to live birth should be reported when applicable. LIMITATIONS, REASONS FOR CAUTION: We used consensus development methods which have inherent limitations, including the representativeness of the participant sample, Delphi survey attrition and an arbitrary consensus threshold. WIDER IMPLICATIONS OF THE FINDINGS: Embedding the core outcome set within RCTs and systematic reviews should ensure the comprehensive selection, collection and reporting of core outcomes. Research funding bodies, the Standard Protocol Items: Recommendations for Interventional Trials (SPIRIT) statement, and over 80 specialty journals, including the Cochrane Gynaecology and Fertility Group, Fertility and Sterility and Human Reproduction, have committed to implementing this core outcome set. STUDY FUNDING/COMPETING INTEREST(S): This research was funded by the Catalyst Fund, Royal Society of New Zealand, Auckland Medical Research Fund and Maurice and Phyllis Paykel Trust. The funder had no role in the design and conduct of the study, the collection, management, analysis or interpretation of data, or manuscript preparation. B.W.J.M. is supported by a National Health and Medical Research Council Practitioner Fellowship (GNT1082548). S.B. was supported by University of Auckland Foundation Seelye Travelling Fellowship. S.B. reports being the Editor-in-Chief of Human Reproduction Open and an editor of the Cochrane Gynaecology and Fertility group. J.L.H.E. reports being the Editor Emeritus of Human Reproduction. J.M.L.K. reports research sponsorship from Ferring and Theramex. R.S.L. reports consultancy fees from Abbvie, Bayer, Ferring, Fractyl, Insud Pharma and Kindex and research sponsorship from Guerbet and Hass Avocado Board. B.W.J.M. reports consultancy fees from Guerbet, iGenomix, Merck, Merck KGaA and ObsEva. C.N. reports being the Co Editor-in-Chief of Fertility and Sterility and Section Editor of the Journal of Urology, research sponsorship from Ferring, and retains a financial interest in NexHand. A.S. reports consultancy fees from Guerbet. E.H.Y.N. reports research sponsorship from Merck. N.L.V. reports consultancy and conference fees from Ferring, Merck and Merck Sharp and Dohme. The remaining authors declare no competing interests in relation to the work presented. All authors have completed the disclosure form. © The Author(s) 2020. Published by Oxford University Press on behalf of European Society of Human Reproduction and Embryology.</p>				
160.	<p>Duffy, J. M. N., Bhattacharya, S., Bofill, M., Collura, B., Curtis, C., Evers, J. L. H., Giudice, L. C., Farquharson, R. G., Franik, S., Hickey, M., Hull, M. L., Jordan, V., Khalaf, Y., Legro, R. S., Lensen, S., Mavrelis, D., Mol, B. W., Niederberger, C., Ng, E. H. Y., Puscasiu, L., Repping, S., Sarris, I., Showell, M., Strandell, A., Vail, A., Van Wely, M., Vercoe, M., Vuong, N. L., Wang, A. Y., Wang, R., Wilkinson, J., Youssef, M. A., Farquhar, C. M., Abou-Setta, A. M., Aguilera, J. J., Alahwany, H., Atanda, O. O. A., Balkenende, E. M. E., Barnhart, K. T., Beebejaun, Y., Black, M., Repromed, D. G., Chambers, G. M., Chughtai, A. A., Crosby, J. A., Schwarze, J. E., Cuevas-Saiz, I., D'angelo, A., Dubois, D. D., Duckitt, K., Encinas, C., Gerval, M., Giang, N. H., Le, T. K., Nguyen, D. T. P., Tran, C. T., Gibreel, A., Gingel, L. J., Perez, M. J., Marks, K. L., Mills, D. J., Glanville, E. J.,</p>	INT	JUL TO DEC	Reproductive Medicine	SCOPUS

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Glujovsky, D., Granne, I., Griesinger, G., Hamzehgardeshi, Z., Hirsch, M., Horton, M., Jain, S., Jones, C. A., Shapiro, H. M., Kamath, M. S., Knijnenburg, J., Kostova, E., La Marca, A., Leader, A., Leeviers, B., Chinese, J. L., Loto, O. M., Martinez-Vazquez, R. M., Mctavish, A. R., Nair, R. R., Otter, A. S., Pacey, A. A., Rautakallio-Hokkanen, S., Sadler, L. C., Sagle, P., Simpson, J. L., Siristatidis, C. S., Sood, A., Strawbridge, C., Torrance, H. L., Votteler, E. L., Wang, C. C., Watson, A., Yossry, M. and Core Outcome Measure for Infertility Trials, Initiative</p> <p>Standardizing definitions and reporting guidelines for the infertility core outcome set: An international consensus development study Human Reproduction; 2020, 35 (12): 2735-2745</p> <p>Address: King's Fertility, Fetal Medicine Research Institute, London, United Kingdom Institute for Women's Health, University College London, London, United Kingdom School of Medicine, Medical Sciences and Nutrition, University of Aberdeen, United Kingdom Department of Obstetrics and Gynaecology, University of Auckland, Auckland, New Zealand RESOLVE, The National Infertility AssociationVA, United States Fertility New Zealand, Auckland, New Zealand School of Psychology, University of Waikato, Hamilton, New Zealand Maastricht University Medical Centre, Maastricht, Netherlands Center for Research, Innovation and Training in Reproduction and Infertility, Center for Reproductive Sciences, University of California, San Francisco, CA, United States International Federation of Fertility Societies, Philadelphia, PA, United States Department of Obstetrics and Gynaecology, Liverpool Women's NHS Foundation Trust, Liverpool, United Kingdom Department of Obstetrics and Gynaecology, Münster University Hospital, Münster, Germany Department of Obstetrics and Gynaecology, University of MelbourneVIC, Australia Robinson Research Institute, University of Adelaide, Adelaide, SA, Australia Department of Women and Children's Health, King's College London, Guy's Hospital, London, United Kingdom Department of Obstetrics and Gynaecology, Penn State College of MedicinePA, United States Reproductive Medicine Unit, University College Hospital, London, United Kingdom Department of Obstetrics and Gynaecology, Monash University, Melbourne, Australia Department of Urology, University of Illinois at Chicago, College of Medicine, Chicago, IL, United States Department of Obstetrics and Gynaecology, The University of Hong Kong, Hong Kong, Hong Kong Shenzhen Key Laboratory of Fertility Regulation, The University of Hong Kong-Shenzhen Hospital, China</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Pharmacy, Sciences and Technology, University of Medicine, Targu Mures, Romania Amsterdam University Medical Centers, Amsterdam, Netherlands National Health Care Institute, Diemen, Netherlands Cochrane Gynaecology and Fertility Group, University of Auckland, Auckland, New Zealand Department of Obstetrics and Gynecology, Sahlgrenska Academy, University of Gothenburg, Göteborg, Sweden Centre for Biostatistics, University of Manchester, Manchester Academic Health Science Centre, Manchester, United Kingdom Department of Obstetrics and Gynaecology, University of Medicine and Pharmacy at Ho Chi Minh City, Ho Chi Minh City, Viet Nam Faculty of Health, University of Technology, Sydney, Broadway, Australia Department of Obstetrics & Gynaecology, Faculty of Medicine, Cairo University, Cairo, Egypt University of Manitoba, Canada Argentina University of Nottingham, United Kingdom Ladoke Akintola University of Technology Teaching Hospital, Nigeria University of Amsterdam, Netherlands University of Pennsylvania, United States King's Fertility, Fetal Medicine Research Institute, United Kingdom New Zealand University of New South Wales, Australia Clinica Las Condes, Chile Hospital General Universitario de Valencia, Spain University of Waikato, New Zealand Wales Fertility Institute, United Kingdom Ottawa Fertility Centre, Canada University of British Columbia, Canada Geneva Foundation for Medical Education and Research, Bolivia Chelsea and Westminster Hospital NHS Foundation Trust, United Kingdom Viet Nam Mansoura University, Egypt United Kingdom Fertility Plus, National Women's Hospital, New Zealand CEGYR Medicina Reproductiva, Argentina University of Oxford, United Kingdom University Hospital of Schleswig-Holstein, Germany Mazandaran University of Medical Sciences, Iran University College London Hospitals, United Kingdom Pregna Reproductive Medicine, Argentina Dreamz IVF, India University of Toronto, Canada Christian Medical College, Vellore, India				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Freya, Netherlands Cochrane Gynaecology and Fertility, Netherlands University Hospital of Modena, Italy Ottawa Hospital Research Institute, Canada University Hospital Zurich, Switzerland University of Hong Kong, China Obafemi Awolowo University, Nigeria Cochrane Iberoamerica, Spain University of Aberdeen, United Kingdom Mitera Hospital, India Osakidetza OSI, Spain University of Sheffield, United Kingdom Fertility Europe, Belgium Auckland District Health Board, New Zealand University of Alberta, Canada Florida International University, United States Greece St. Mary's Hospital, United Kingdom Fertility Network UK, United Kingdom University Medical Center Utrecht, Netherlands Bath Fertility Centre, United Kingdom The Chinese University of Hong Kong, Hong Kong, Hong Kong Tameside Foundation Trust, United Kingdom City Hospital Sunderland, United Kingdom</p> <p>STUDY QUESTION: Can consensus definitions for the core outcome set for infertility be identified in order to recommend a standardized approach to reporting? SUMMARY ANSWER: Consensus definitions for individual core outcomes, contextual statements and a standardized reporting table have been developed. WHAT IS KNOWN ALREADY: Different definitions exist for individual core outcomes for infertility. This variation increases the opportunities for researchers to engage with selective outcome reporting, which undermines secondary research and compromises clinical practice guideline development. STUDY DESIGN, SIZE, DURATION: Potential definitions were identified by a systematic review of definition development initiatives and clinical practice guidelines and by reviewing Cochrane Gynaecology and Fertility Group guidelines. These definitions were discussed in a face-to-face consensus development meeting, which agreed consensus definitions. A standardized approach to reporting was also developed as part of the process. PARTICIPANTS/MATERIALS, SETTING, METHODS: Healthcare professionals, researchers and people with fertility problems were brought together in an open and transparent process using formal consensus development methods. MAIN RESULTS AND THE ROLE OF CHANCE: Forty-four potential definitions were inventoried across four definition development initiatives, including the Harbin Consensus Conference Workshop Group and International Committee for Monitoring Assisted Reproductive</p>				

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	Technologies, 12 clinical practice guidelines and Cochrane Gynaecology and Fertility Group guidelines. Twenty-seven participants, from 11 countries, contributed to the consensus development meeting. Consensus definitions were successfully developed for all core outcomes. Specific recommendations were made to improve reporting. LIMITATIONS, REASONS FOR CAUTION: We used consensus development methods, which have inherent limitations. There was limited representation from low- and middle-income countries. WIDER IMPLICATIONS OF THE FINDINGS: A minimum data set should assist researchers in populating protocols, case report forms and other data collection tools. The generic reporting table should provide clear guidance to researchers and improve the reporting of their results within journal publications and conference presentations. Research funding bodies, the Standard Protocol Items: Recommendations for Interventional Trials statement, and over 80 specialty journals have committed to implementing this core outcome set. STUDY FUNDING/COMPETING INTEREST(S): This research was funded by the Catalyst Fund, Royal Society of New Zealand, Auckland Medical Research Fund and Maurice and Phyllis Paykel Trust. Siladitya Bhattacharya reports being the Editor-in-Chief of Human Reproduction Open and an editor of the Cochrane Gynaecology and Fertility Group. J.L.H.E. reports being the Editor Emeritus of Human Reproduction. R.S.L. reports consultancy fees from Abbvie, Bayer, Ferring, Fractyl, Insud Pharma and Kindex and research sponsorship from Guerbet and Hass Avocado Board. B.W.M. reports consultancy fees from Guerbet, iGenomix, Merck, Merck KGaA and ObsEva. C.N. reports being the Editor-in-Chief of Fertility and Sterility and Section Editor of the Journal of Urology, research sponsorship from Ferring, and a financial interest in NexHand. E.H.Y.N. reports research sponsorship from Merck. A.S. reports consultancy fees from Guerbet. J.W. reports being a statistical editor for the Cochrane Gynaecology and Fertility Group. A.V. reports that he is a Statistical Editor of the Cochrane Gynaecology & Fertility Review Group and of the journal Reproduction. His employing institution has received payment from Human Fertilisation and Embryology Authority for his advice on review of research evidence to inform their 'traffic light' system for infertility treatment 'add-ons'. N.L.V. reports consultancy and conference fees from Ferring, Merck and Merck Sharp and Dohme. The remaining authors declare no competing interests in relation to the work presented. All authors have completed the disclosure form. © The Author(s) 2020. Published by Oxford University Press on behalf of European Society of Human Reproduction and Embryology.				
161.	Dutta, A. K., Goel, A., Kirubakaran, R., Chacko, A. and Tharyan, P. Nasogastric versus nasojejunal tube feeding for severe acute pancreatitis Cochrane Database Syst Rev; 2020, 3 (3): CD010582 Address: Christian Medical College and Hospital, Department of Gastroenterology, Ida Scudder Road, Vellore, Tamil Nadu, India, 632004. Christian Medical College, Department of Gastrointestinal Sciences, Ida Scudder	INT	JAN TO JUN	Gastroenterology, Gastrointestinal Sciences, Cochrane South Asia, Clinical Epidemiology	PMID:32216139 PMC ID: PMC7098540 WOS:000522683100006 SCOPUS H-INDEX:261 IF: 7.755 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Road, Vellore, Tamil Nadu, India, 632004. Christian Medical College, Cochrane South Asia, Prof. BV Moses Centre for Evidence-Informed Healthcare and Health Policy, Carman Block II Floor, CMC Campus, Bagayam, Vellore, India, 632002. Christian Medical College, Clinical Epidemiology Unit, Prof. BV Moses Centre for Evidence-Informed Healthcare and Health Policy, Carman Block II Floor, CMC Campus, Bagayam, Vellore, Tamil Nadu, India, 632002.</p> <p>BACKGROUND: Nutrition is an important aspect of management in severe acute pancreatitis. Enteral nutrition has advantages over parenteral nutrition and is the preferred method of feeding. Enteral feeding via nasojejunal tube is often recommended, but its benefits over nasogastric feeding are unclear. The placement of a nasogastric tube is technically simpler than the placement of a nasojejunal tube. OBJECTIVES: To compare the mortality, morbidity, and nutritional status outcomes of people with severe acute pancreatitis fed via nasogastric tube versus nasojejunal tube. SEARCH METHODS: We searched the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, Embase, and LILACS on 17 October 2019 without using any language restrictions. We also searched reference lists and conference proceedings for relevant studies and clinical trial registries for ongoing trials. We contacted authors for additional information. SELECTION CRITERIA: We included randomised controlled trials (RCTs) and quasi-RCTs comparing enteral feeding by nasogastric and nasojejunal tubes in participants with severe acute pancreatitis. DATA COLLECTION AND ANALYSIS: Two review authors independently screened studies for inclusion, assessed risk of bias of the included studies, and extracted data. This information was independently verified by the other review authors. We used standard methods expected by Cochrane to assess the risk of bias and perform data synthesis. We rated the certainty of evidence according to GRADE. MAIN RESULTS: We included five RCTs that randomised a total of 220 adult participants from India, Scotland, and the USA. Two of the trial reports were available only as abstracts. The trials differed in the criteria used to rate the severity of acute pancreatitis, and three trials excluded those who presented in severe shock. The duration of onset of symptoms before presentation in the trials ranged from within one week to four weeks. The trials also differed in the methods used to confirm the placement of the tubes and in what was considered to be nasojejunal placement. We assessed none of the trials as at high risk of bias, though reporting of methods in four trials was insufficient to judge the risk of bias for one or more of the domains assessed. There was no evidence of effect with nasogastric or nasojejunal placement on the primary outcome of mortality (risk ratio (RR) 0.65, 95% confidence interval (CI) 0.36 to 1.17; I(2) = 0%; 5 trials, 220 participants; very low-certainty evidence due to indirectness and imprecision). Similarly, there was no evidence of effect on the secondary outcomes for which data were available. These included organ failure (3 trials, 145 participants), rate of infection (2 trials, 108 participants), success rate (3 trials, 159 participants), complications associated with the procedure (2 trials, 80</p>				

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	participants), need for surgical intervention (3 trials, 145 participants), requirement of parenteral nutrition (2 trials, 80 participants), complications associated with feeds (4 trials, 195 participants), and exacerbation of pain (4 trials, 195 participants). However, the certainty of the evidence for these secondary outcomes was also very low due to indirectness and imprecision. Three trials (117 participants) reported on length of hospital stay, but the data were not suitable for meta-analysis. None of the trials reported data suitable for meta-analysis for the other secondary outcomes of this review, which included days taken to achieve full nutrition requirement, duration of tube feeding, and duration of analgesic requirement after feeding tube placement. AUTHORS' CONCLUSIONS: There is insufficient evidence to conclude that there is superiority, inferiority, or equivalence between the nasogastric and nasojejunal mode of enteral tube feeding in people with severe acute pancreatitis.				
162.	Ebenezer, J. A. and Mathews, S. S. Hairy Polyp of the Nasopharynx Associated With Hypoplastic Soft Palate, Low Eustachian Tube Orifice, and Tonsil Ear Nose Throat J; 2020, 145561320944115 Address: Department of ENT, Christian Medical College, Vellore , Tamil Nadu, India.	INT	JUL TO DEC	ENT	PMID: 32720810
163.	Evelyn, C., Vettiyl, G. I., Lydia, J. S. and Rose, W. Umbilical Diphtheria: Resurgence of a Forgotten Entity Indian Pediatr; 2020, 57 (3): 265-266 Address: Department of Pediatrics, Christian Medical College, Vellore 632 004, India. Department of Microbiology, Christian Medical College, Vellore 632 004, India. Department of Pediatrics, Christian Medical College, Vellore 632 004, India. winsleyrose@cmcvellore.ac.in . Diphtheria has had a resurgence in India over the past decade. We present a case of umbilical diphtheria in a neonate, who had a good outcome with administration of anti-toxin and antibiotics.	NAT	JAN TO JUN	Pediatrics, Microbiology	PMID:32198872 WOS:000522444600020 SCOPUS H-INDEX:49 IF: 1.163 BIOXBIO (2018/2019)
164.	Ferreira, J. M., Aaron, S., Van Kammen, M. S., Conforto, A., Arauz, A., Carvalho, M., Masjuan, J., Sharma, V. K., Uyttenboogaart, M., Werring, D., Bazan, R., Mohindra, S., Putaala, J., Weber, J., Sousa, D., Canhao, P., Coert, B., Kirubakaran, P., Singh, P., Coutinho, J. and Ferro, J. M. Decompressive neurosurgery for patients with cerebral venous thrombosis. A prospective multicenter registry (DECOMPRESS2) European Journal of Neurology; 2020, 27 20-20 Address: [Ferreira, J. M.] Inst Med Mol, Jose Ferro LAB, Lisbon, Portugal. [Aaron, S.; Kirubakaran, P.; Singh, P.] Christian Med Coll & Hosp , Dept Neurol Sci, Vellore , Tamil Nadu, India. [van Kammen, M. Sanchez] Univ Amsterdam, Dept Neurol,	INT	JAN TO JUN	Neurological Sciences	WOS:000534616800028 H-INDEX:117 IF: 4.387 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Amsterdam UMC, Amsterdam, Netherlands. [Conforto, A.] Univ Sao Paulo, Hosp Clin, Stroke Unit, Sao Paulo, Brazil. [Arauz, A.] Inst Nacl Neurol & Neurocirurgia, Dept Neurol, Mexico City, DF, Mexico. [Carvalho, M.] Hosp Sao Joao, Neurol, Porto, Portugal. [Masjuan, J.] Hosp Univ Ramon y Cajal, Neurol, Madrid, Spain. [Sharma, V. K.] Natl Univ Singapore Hosp, Neurol, Singapore, Singapore. [Werring, D.] Natl Hosp Neurol & Neurosurg, Dept Neurol, London, England. [Bazan, R.] Univ Estadual Paulista, Fac Med Botucatu, Dept Neurol Psicol & Psiquiatria, Botucatu, SP, Brazil. [Mohindra, S.] Postgrad Inst Med Educ & Res, Dept Neurosurg, Chandigarh, India. [Putala, J.] Helsinki Univ Cent Hosp, Neurol, Helsinki, Finland. [Weber, J.] Steinenberg Klinikum, Neurochirurg Klin, Reutlingen, Germany. [Sousa, D.] Hosp Santa Maria, Dept Neurosci Neurol, Lisbon, Portugal. [Canhao, P.] Univ Lisbon, Hosp Santa Maria, Dept Neurosci Neurol, Lisbon, Portugal. [Coert, B.] Acad Med Ctr, Neurosurg Ctr Amsterdam, Amsterdam, Netherlands. [Coutinho, J.] Acad Med Ctr, Dept Neurol, Amsterdam, Netherlands. [Ferro, J. M.] Hosp Santa Maria, Fac Med Lisboa, Dept Neurol, Lisbon, Portugal.				
165.	Fletcher, G. J., Eapen, C. E. and Abraham, P. Hepatitis B genotyping: The utility for the clinicians Indian J Gastroenterol; 2020, 39 (4): 315-320 Address: Department of Virology, Christian Medical College, Vellore , 632 004, India. Department of Hepatology, Christian Medical College, Vellore , 632 004, India. eapen@cmcvellore.ac.in.	NAT	JUL TO DEC	Virology, Hepatology	PMID: 31617082
166.	Fouzia, N. A., Sharma, V., Ganesan, S., Palani, H. K., Balasundaram, N., David, S., Kulkarni, U. P., Korula, A., Devasia, A. J., Nair, S. C., Janet, N. B., Abraham, A., Mani, T., Lakshmanan, J., Balasubramanian, P., George, B. and Mathews, V. Management of relapse in acute promyelocytic leukaemia treated with up-front arsenic trioxide-based regimens Br J Haematol; 2020, Address: Department of Haematology, Christian Medical College, Vellore , India. Department of Immunohaematology and Transfusion Medicine, Christian Medical College, Vellore , India. Department of Biostatistics, Christian Medical College, Vellore , India. The standard of care for patients with acute promyelocytic leukaemia (APL) relapsing after front-line treatment with arsenic trioxide (ATO)-based regimens remains to be defined. A total of 67 patients who relapsed after receiving ATO-based up-front therapy and were also salvaged using an ATO-based regimen were evaluated. The median (range) age of patients was 28 (4-54) years. While 63/67 (94%) achieved a second molecular remission (MR) after salvage therapy, three (4.5%) died during salvage therapy. An autologous stem cell transplant (auto-SCT) was offered to all patients who achieved MR, 35/63 (55.6%) opted for auto-SCT the rest were administered an ATO + all-trans retinoic acid maintenance regimen. The mean (SD) 5-year Kaplan-Meier estimate of overall survival and event-free survival of those who received auto-SCT versus those who did not was 90.3 (5.3)%	INT	JUL TO DEC	Haematology, Immunohaematology and Transfusion Medicine, Biostatistics	PMID: 33216980

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	versus 58.6 (10.4)% (P = 0.004), and 87.1 (6.0)% versus 47.7 (10.3)% (P = 0.001) respectively. On multivariate analysis, failure to consolidate MR with an auto-SCT was associated with a significantly increased risk of relapse [hazard ratio (HR) 4.91, 95% confidence interval (CI) 1.56-15.41; P = 0.006]. MR induction with ATO-based regimens followed by an auto-SCT in children and young adults with relapsed APL who were treated with front-line ATO-based regimens was associated with excellent long-term survival.				
167.	Francis, D. V., Charles, A. S., Anand, R., Samuel, P. and Rabi, S. Virtual Microscopy using OMERO - Its relevance as a teaching tool in histology among first year medical students in India Journal of Anatomy; 2020, 236 213-214 Address: [Francis, Deepak Vinod; Charles, Aby S.; Anand, R.; Samuel, Prasanna; Rabi, Suganthy] Christian Med Coll & Hosp, Vellore , Tamil Nadu, India.	INT	JAN TO JUN	Anatomy	WOS:000524885900394 H-INDEX:112 IF: 2.638 BIOXBIO (2018/2019)
168.	Gairola, M., Prabhash, K., Babu, G., Chaturvedi, P., Kuriakose, M., Birur, P., Anand, A. K., Kaushal, A., Mahajan, A., Syiemlieh, J., Singhal, M., Ramachandra, P., Goyal, S., John, S., Nayyar, R., Patil, V. M., Rao, V., Roshan, V. and Rath, G. K. Indian clinical practice consensus guidelines for the management of nasopharyngeal cancer Indian journal of cancer; 2020, 57 S9-S11 Address: Department of Radiation Oncology, Rajiv Gandhi Cancer Institute & Research Centre, New Delhi, India Department of Medical Oncology, Tata Memorial Hospital, Mumbai, Maharashtra, India Department of Medical Oncology, Kidwai Memorial Institute of Oncology, BangaloreKarnataka, India Department of Surgical Oncology, Tata Memorial Hospital, Mumbai, Maharashtra, India Department of Surgical Oncology, Cochin Cancer Research Centre, Cochin, Kerala, India Department of Oral Medicine and Radiology, KLE Society's Institute of Dental Sciences (KLESIDS), BangaloreKarnataka, India Department of Radiation Oncology, Max Super Speciality Hospital, New Delhi, India Department of Medical Oncology, HCG Cancer Centre, Ahmedabad, Gujarat, India Department of Radiodiagnosis and Imaging, Tata Memorial Hospital, Mumbai, Maharashtra, India Department of Radiation Oncology, Civil Hospital, Shillong, Meghalaya, India Department of Medical Oncology, Indraprastha Apollo Hospital, New Delhi, India Department of Medical Oncology, Rajiv Gandhi Cancer Institute & Research Centre, New Delhi, India Department of Medical Oncology, Rajiv Gandhi Cancer InstituteDelhi, India Department of Radiotherapy, Christian Medical College, Vellore , Tamil Nadu,	NAT	JAN TO JUN	Radiotherapy	WOS:000518668700003 SCOPUS H-INDEX:36 IF: 0.429 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	India Department of Surgical Oncology, Max Super Speciality Hospital, New Delhi, India Department of Surgical Oncology, HCG Cancer Centre ,BangaloreKarnataka, India Department of Radiation Oncology, Shri Mata Vaishno Devi Narayana Superspeciality Hospital, Jammu, India Department of Radiation Oncology, National Cancer Institute, All India Institute of Medical SciencesDelhi, India				
169.	Gamage, D. G., Riddell, M. A., Joshi, R., Thankappan, K. R., Chow, C. K., Oldenburg, B., Evans, R. G., Mahal, A. S., Kalyanram, K., Kartik, K., Suresh, O., Thomas, N., Mini, G. K., Maulik, P. K., Srikanth, V. K., Arabshahi, S., Varma, R. P., Guggilla, R. K., D'esposito, F., Sathish, T., Alim, M. and Thrift, A. G. Effectiveness of a scalable group-based education and monitoring program, delivered by health workers, to improve control of hypertension in rural India: A cluster randomised controlled trial PLoS Medicine; 2020, 17 (1): Address: Department of Medicine, School of Clinical Sciences at Monash Health, Monash University, Melbourne, VIC, Australia George Institute for Global Health, University of New South Wales, Sydney, NSW, Australia University of Sydney, Sydney, NSW, Australia George Institute for Global Health, New Delhi, India Achutha Menon Centre for Health Science Studies, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, Kerala, India Department of Cardiology, Westmead Hospital, Sydney, NSW, Australia Melbourne School of Population and Global Health, University of Melbourne, Melbourne, VIC, Australia Cardiovascular Disease Program, Biomedicine Discovery Institute, Department of Physiology, Monash University, Melbourne, VIC, Australia School of Public Health and Preventative Medicine, Monash University, Melbourne, VIC, Australia Nossal Institute for Global Health, Melbourne School of Population and Global Health, University of Melbourne, Melbourne, VIC, Australia Rishi Valley Rural Health Centre, Chittoor District, Andhra Pradesh, India Department of Endocrinology, Diabetes & Metabolism, Christian Medical College, Vellore , Tamil Nadu, India Global Institute of Public Health, Ananthapuri Hospitals and Research Institute, Trivandrum, Kerala, India George Institute for Global Health, Oxford University, Oxford, United Kingdom Peninsula Clinical School, Central Clinical School, Monash University, Frankston, VIC, Australia Department of Population Medicine and Civilization Diseases Prevention, Faculty of Medicine, Division of Dentistry, Division of Medical Education in English, Medical University of Bialystok, Bialystok, Poland	INT	JAN TO JUN	Endocrinology	SCOPUS H-INDEX:215 IF: 11.048 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Centre for Population Health Sciences, Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore University of Central Lancashire, Preston, United Kingdom</p> <p>Background New methods are required to manage hypertension in resource-poor settings. We hypothesised that a community health worker (CHW)-led group-based education and monitoring intervention would improve control of blood pressure (BP). Methods and findings We conducted a baseline community-based survey followed by a cluster randomised controlled trial of people with hypertension in 3 rural regions of South India, each at differing stages of epidemiological transition. Participants with hypertension, defined as BP \geq 140/90 mm Hg or taking antihypertensive medication, were advised to visit a doctor. In each region, villages were randomly assigned to intervention or usual care (UC) in a 1:2 ratio. In intervention clusters, trained CHWs delivered a group-based intervention to people with hypertension. The program, conducted fortnightly for 3 months, included monitoring of BP, education about hypertension, and support for healthy lifestyle change. Outcomes were assessed approximately 2 months after completion of the intervention. The primary outcome was control of BP (BP < 140/90 mm Hg), analysed using mixed effects regression, clustered by village within region and adjusted for baseline control of hypertension (using intention-to-treat principles). Of 2,382 potentially eligible people, 637 from 5 intervention clusters and 1,097 from 10 UC clusters were recruited between November 2015 and April 2016, with follow-up occurring in 459 in the intervention group and 1,012 in UC. Mean age was 56.9 years (SD 13.7). Baseline BP was similar between groups. Control of BP improved from baseline to follow-up more in the intervention group (from 227 [49.5%] to 320 [69.7%] individuals) than in the UC group (from 528 [52.2%] to 624 [61.7%] individuals) (odds ratio [OR] 1.6, 95% CI 1.2-2.1; P = 0.001). In secondary outcome analyses, there was a greater decline in systolic BP in the intervention than UC group (-5.0 mm Hg, 95% CI -7.1 to -3.0; P < 0.001) and a greater decline in diastolic BP (-2.1 mm Hg, 95% CI -3.6 to -0.6; P < 0.006), but no detectable difference in the use of BP-lowering medications between groups (OR 1.2, 95% CI 0.8-1.9; P = 0.34). Similar results were found when using imputation analyses that included those lost to follow-up. Limitations include a relatively short follow-up period and use of outcome assessors who were not blinded to the group allocation. Conclusions While the durability of the effect is uncertain, this trial provides evidence that a low-cost program using CHWs to deliver an education and monitoring intervention is effective in controlling BP and is potentially scalable in resource-poor settings globally. © 2020 Gamage et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.</p>				
170.	Ganapati, A., Gowri, M., Antonisamy, B. and Danda, D. Combination of methotrexate and sulfasalazine is an efficacious option for axial	INT	JUL TO DEC	Biostatistics, Clinical Immunology and Rheumatology	PMID: 33058032

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>spondyloarthritis in a resource-limited, real-world clinical setting: a prospective cohort study Clin Rheumatol; 2020, Address: Department of Clinical Immunology and Rheumatology, Christian Medical College & Hospital, Ida Scudder Road, Vellore, Tamil Nadu, 632004, India. Department of Biostatistics, Christian Medical College, Vellore, India. Department of Clinical Immunology and Rheumatology, Christian Medical College & Hospital, Ida Scudder Road, Vellore, Tamil Nadu, 632004, India. debashisdandacmc@hotmail.com.</p> <p>OBJECTIVE: Evaluation of response to combination conventional synthetic DMARD (csDMARD) therapy with methotrexate (MTX) and sulfasalazine (SSZ) in active axial spondyloarthritis (axSpA) patients without peripheral arthritis (group 1) as compared to active axSpA with peripheral arthritis (group 2), who are economically constrained for biologicals. METHODS: A prospective, observational, single-centre, cohort study on 150 consecutive active axSpA patients who were already initiated on the above mentioned combination csDMARD therapy and satisfying the other pre-defined eligibility criteria, was conducted between July 2016 and July 2017 using ASAS20 response as primary outcome measure at 3 and 6 months post treatment. RESULTS: ASAS20 response at 3 months was achieved in 31/58 (53.4%) and in 24/36 (66.6%) in groups 1 and 2, respectively (p = 0.2); at 6 months, these figures were 45/76 (59.2%) and 28/44 (63.6%), respectively (p = 0.6). Similarly, there was significant reduction in mean ASAS NSAID index from 29.6 to 14 over 6 months from baseline (p = 0.001), and it was similar in both groups. Using BASDAI \geq 4 to define active disease, a 34% reduction in requirement of biologicals was also observed. CONCLUSION: In resource-limited population, treatment with combination of methotrexate and sulphasalazine over a period of 6 months is equally efficacious in patients with active axSpA with and without peripheral arthritis, as evidenced by improved ASAS20 response rates, reduction in NSAID use and fewer patients switching to biologicals. Key Points • Combination of MTX+SSZ was efficacious and safe in active axSpA patients who had economic hardships to use biologicals. • This benefit in axSpA patients was similar between those without any peripheral arthritis and those with. • MTX+SSZ combination therapy also demonstrated NSAID sparing action. • Combination of MTX and SSZ prevented escalation to biological therapy as per a BASDAI score driven policy.</p>				
171.	<p>Ganapati, A., Kabeerdoss, J., Gowri, M., Antonisamy, B. and Danda, D. Myeloid-related proteins 8/14 failed to act as theragnostic biomarker in axial spondyloarthritis patients on combination disease-modifying anti-rheumatic drugs therapy Indian Journal of Rheumatology; 2020, 15 (4): 282-285 Address: Department of Clinical Immunology and Rheumatology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India</p>	NAT	JUL TO DEC	Clinical Immunology and Rheumatology, Biostatistics	SCOPUS

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Background: Reports signifying the utility of myeloid-related proteins (MRP) 8/14 in axial spondyloarthritis (AxSpA) as a theragnostic biomarker are scarce. Objectives: Evaluating the utility of serum MRP 8/14 (baseline levels and change from baseline to 3 months) in AxSpA as a predictor of Assessment of SpondyloArthritis International Society (ASAS) 20 response at 6 months post combination disease-modifying anti-rheumatic drugs (DMARD) therapy. Methods: Serum MRP 8/14 was assayed using enzyme-linked immunosorbent assay platforms (R&D systems, USA) at baseline in 83 AxSpA patients satisfying ASAS 2009 criteria meeting the predefined eligibility criteria; treated with a combination of methotrexate, sulfasalazine at optimum tolerated doses with on-demand nonsteroidal anti-inflammatory agents and 30 healthy age-matched controls. Repeat measurement was done at 3 months in 60 patients. Results: Median MRP 8/14 levels in AxSpA patients was 3.00 (3.96) µg/ml compared to 2.3 (3.29) µg/ml in controls (P = 0.2). Median baseline MRP 8/14 levels in ASAS 20 responders at 6 months (n = 36) was 3.6 (4.1) µg/ml compared to 2.4 (4.8) µg/ml in nonresponders (n = 35) (P = 0.4). Median Δ (baseline to 3 months) MRP 8/14 levels in ASAS 20 responders at 6 months (n = 33) was - 1 (-2.7) µg/ml compared to - 0.2 (-3.8) µg/ml for nonresponders (n = 27) (P = 0.5). Among the 83 patients with 138 disease activity assessments at baseline and 3 months post therapy, median MRP 8/14 in active disease (bath ankylosing spondylitis disease activity index [BASDAI] ≥4) (n = 112) was 2.2 (3.8) µg/ml, compared to 2 (2.3) µg/ml (P = 0.5) in inactive disease (BASDAI < 4) (n = 26). Conclusion: Serum MRP 8/14 did not serve as a theragnostic biomarker in our cohort of AxSpA patients treated with combination DMARDs and on-demand NSAIDs. © 2020 Indian Journal of Rheumatology Published by Wolters Kluwer - Medknow</p>				
172.	<p>Gandhi, M., Rai, E., Shirley, A. and Suda, N. K. Massive gingival bleed: a rare manifestation of cyclosporine toxicity BMJ case reports; 2020, 13 (12): Address: Anaesthesia, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India meeragk@gmail.com. Anaesthesia, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. A 12-year-old patient of thalassaemia major developed autoimmune cytopaenia after undergoing haematopoietic stem cell transplantation. She was started on cyclosporine (CsA) in view of poor response to steroids. She developed CsA toxicity manifesting as gum hyperplasia with multiple episodes of gum bleed. During endotracheal intubation for an elective splenectomy, she developed significant bleeding from gums requiring massive transfusion. Postoperatively the gum bleed persisted even after embolisation of facial artery and multiple transfusions. The catastrophic sequelae include transfusion-related lung injury, acute circulatory failure with subsequent cardiac arrest and death. Gum hyperplasia is a commonly reported toxic effect of CsA. Lethal presentations of this toxicity with such severity are limited in the medical literature. Evaluation of the patient's medical and laboratory records, along with a review of literature, was very helpful in</p>	INT	JUL TO DEC	Anaesthesia	PMID: 33370971 PMC:7757501

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
173.	<p>understanding more about the toxicity of CsA.</p> <p>Ganesan, S., Palani, H. K., Balasundaram, N., David, S., Devasia, A. J., George, B. and Mathews, V. Combination Lenalidomide/Bortezomib Treatment Synergistically Induces Calpain-Dependent Ikaros Cleavage and Apoptosis in Myeloma Cells Mol Cancer Res; 2020, 18 (4): 529-536</p> <p>Address: [Ganesan, Saravanan; Palani, Hamenth Kumar; Balasundaram, Nithya; David, Sachin; Devasia, Anup J.; George, Biju; Mathews, Vikram] Christian Med Coll & Hosp, Dept Haematol, Vellore, Tamil Nadu, India. Mathews, V (reprint author), Christian Med Coll & Hosp, Ida Scudder Rd, Vellore 632004, Tamil Nadu, India. vikram@cmcvellore.ac.in</p> <p>Multiple myeloma had been successfully treated by combining lenalidomide and bortezomib with reports suggesting benefits of such a combination even in relapsed/refractory cases. Recently, it was demonstrated that Ikaros degradation by lenalidomide happens via proteasome-dependent pathway and this process is critical for the eradication of myeloma cells. On the basis of this, an antagonistic effect should be observed if a combination of both these agents were used, which however is not the observation seen in the clinical setting. Our study demonstrates that when these agents are combined they exhibit a synergistic activity against myeloma cells and degradation of Ikaros happens by a proteasome-independent calcium-induced calpain pathway. Our study identifies the crucial role of calcium-induced calpain pathway in inducing apoptosis of myeloma cells when this combination or lenalidomide and bortezomib is used. We also report that this combination enhanced the expression of CD38 compared with lenalidomide alone. Thus, data from our study would establish the rationale for the addition of daratumumab along with this combination to further enhance therapeutic activity against multiple myeloma. IMPLICATIONS: Lenalidomide and bortezomib combination degrades IKZF1 in multiple myeloma through a calcium-dependent calpain and caspase pathway. VISUAL OVERVIEW: http://mcr.aacrjournals.org/content/molcanres/18/4/529/F1.large.jpg.</p>	INT	JAN TO JUN	Clinical Haematology	PMID:31915234 WOS:000522839400002 SCOPUS H-INDEX:131 IF: 4.484 BIOXBIO (2018/2019)
174.	<p>Gautam, K. P., Lijesh, K. U., Jude, J., Gupta, R. D. and Paul, T. V. An uncommon cause of fever in a patient with hyperthyroidism J Family Med Prim Care; 2020, 9 (1): 432-434</p> <p>Address: Department of Endocrinology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Department of Clinical Microbiology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India.</p> <p>Fever as an indicator of disease has always been and remains a clinical symptom of</p>	NAT	JAN TO JUN	Endocrinology, Clinical Microbiology	PMID:32110632 PMC ID: PMC7014895 H-INDEX:NA IF: 0.210 RG (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	great importance. It may be a manifestation of any inflammatory process of the thyroid and also may be presenting feature of thyroid storm. Melioidosis, is an infection caused by the gram negative bacterium Burkholderia pseudomallei and the commonest co-morbidity observed in India is diabetes mellitus. Here we present a case of Graves disease (hyperthyroidism) who was referred by primary care physician with history of prolonged fever of more than one month duration and later diagnosed to have melioidosis. It is important in primary care setting as family physicians need to be aware of this infection as it can affect many organs and early diagnosis and treatment will result in cure of this condition.				
175.	Gautam, K. P., Rajan, R., Cherian, K. E., Kapoor, N., Hephzibah, J. and Paul, T. V. A case of recalcitrant fibrous dysplasia treated with denosumab Joint Bone Spine; 2020, 87 (4): 369-370 Address: Department of Endocrinology, Vellore , Tamil Nadu, India. Departments of Nuclear Medicine, Vellore , Tamil Nadu, India. Department of Endocrinology, Vellore , Tamil Nadu, India. Electronic Address: thomasvpaul@yahoo.com.	INT	JAN TO JUN	Endocrinology, Nuclear Medicine	PMID:32279999 WOS:000540485200024 H-INDEX:77 IF: 3.278 BIOXBIO (2018/2019)
176.	Gautam, R. D., Geevar, T., Nair, S. C., Srivastava, A., Mammen, J., Ramya, V. and Singh, S. Spectrum of rare bleeding disorders in Southern India Haemophilia; 2020, 26 69-69 Address: [Gautam, Rutvi Dave; Geevar, Tulasi; Nair, Sukesh Chandran; Mammen, Joy; Ramya, V.; Singh, Surender] Christian Med Coll & Hosp , Dept Transfus Med & Immunohematol, Vellore , Tamil Nadu, India. [Srivastava, Alok] Christian Med Coll & Hosp , Dept Clin Hematol, Vellore , Tamil Nadu, India.	INT	JAN TO JUN	Transfusion Medicine & Immunohematology, Clinical Hematology	WOS:000536674800119 H-INDEX:88 IF: 3.590 BIOXBIO (2018/2019)
177.	Geevar, T., Gautam, R. D., Nair, S. C., Mammen, J., Srivastava, A., Ramya, V., Singh, S. and Christopher, J. Spectrum of Von Willebrand disease in Southern India Haemophilia; 2020, 26 72-73 Address: [Geevar, Tulasi; Gautam, Rutvi Dave; Nair, Sukesh Chandran; Mammen, Joy; Ramya, V.; Singh, Surender; Christopher, Joel] Christian Med Coll & Hosp , Dept Transfus Med & Immunohematol, Vellore , Tamil Nadu, India. [Geevar, Tulasi] Christian Med Coll & Hosp , Dept Clin Pathol, Vellore , Tamil Nadu, India. [Srivastava, Alok] Christian Med Coll & Hosp , Dept Clin Hematol, Vellore , Tamil Nadu, India.	INT	JAN TO JUN	Transfusion Medicine & Immunohematology, Clinical Hematology, Clinical Pathology	WOS:000536674800126 H-INDEX:88 IF: 3.590 BIOXBIO (2018/2019)
178.	George, A. and George, R. Nivolumab (PD-1 Inhibitor) Induced Exacerbation of Psoriasis Indian Dermatol Online J; 2020, 11 (2): 261-262 Address: Department of Dermatology, Christian Medical College, Vellore , Tamil Nadu, India.	NAT	JAN TO JUN	Dermatology	PMID:32477996 PMC ID: PMC7247661 H-INDEX:NA IF: NA

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
179.	<p>George, B., Menon, H., Bhurani, D., Damodar, S., Apte, S., Seth, T., Sharma, A., Shyam, R., Malhotra, P., Easow, J., Lakshmi, K. M., Agrawal, N., Sengar, M., Nataraj, K. S., Ahmed, R., Sharma, S., Khadwal, A., Prakash, G., Abraham, A., Devasia, A., Korula, A. and Mathews, V.</p> <p>A Prospective Observational Multi-institutional Study on Invasive Fungal Infections Following Chemotherapy for Acute Myeloid Leukemia (MISFIC Study): A Real World Scenario from India Indian Journal of Hematology and Blood Transfusion; 2020, 36 (1): 97-103</p> <p>Address: [George, Biju; Lakshmi, Kavitha M.; Abraham, Aby; Devasia, Anup; Korula, Anu; Mathews, Vikram] Christian Med Coll & Hosp, Vellore, India. [Menon, Hari; Sengar, Manju] Tata Mem Hosp, Mumbai, India. [Bhurani, Dinesh; Agrawal, Narendra; Ahmed, Rayaz] Rajiv Gandhi Canc Inst, New Delhi, India. [Damodar, Sharat; Nataraj, K. S.] Narayana Hirudalaya, Bengaluru, India. [Apte, Shashi] Sahayadri Hosp, Pune, India. [Seth, Tulika] All India Inst Med Sciences, New Delhi, India. [Sharma, Ajay; Sharma, Sanjeevan] R Hosp, New Delhi, India. [Shyam, Radhe] HCG Hosp, Bengaluru, India. [Malhotra, Pankaj; Khadwal, Alka; Prakash, Gaurav] Post Grad Inst Med Educ, Res, PGIMER, Chandigarh, India. [Easow, Jose] Apollo Specialty Hosp, Chennai, India. George, B (reprint author), Christian Med Coll & Hosp, Vellore, India. Biju@cmcvellore.ac.in</p> <p>We performed a prospective multi-centre observational study to understand the incidence of IFI in patients with AML in India with use of anti-fungal prophylaxis. All patients with AML receiving either induction chemotherapy or salvage chemotherapy between November 2014 and February 2016 were included in this prospective observational study from 10 Indian centres. IFI was defined as per the revised EORTC-MSG criteria. Data on type of chemotherapy used, type of anti-fungal prophylaxis used, time to neutrophil recovery, incidence of IFI and survival were collected. Two hundred patients (118 male and 82 females) with a median age of 35 years (range: 2-66) were recruited. One hundred and eighty-six (93%) had newly diagnosed acute myeloid leukemia (AML) while 14 (7%) had relapsed disease. IFI occurred in 53 patients (26.5%) with proven or probable IFI occurring in 17 (8.5%). Use of posaconazole prophylaxis (p = 0.027) was the only factor found to be associated with a reduced incidence of IFI. The overall survival (OS) at 6 weeks and 3 months respectively was similar among patients who had IFI (83.0 +/- 5.2%; 81.0 +/- 5.4%) as compared to those without IFI (84.4 + 3.0%; 81.4 +/- 3.2%). This prospective study reveals a high incidence of IFI in patients undergoing chemotherapy for AML in India. The use of posaconazole prophylaxis was associated with a significantly lower incidence of IFI. Optimal strategies to prevent IFI need to be studied.</p>	INT	JAN TO JUN	Clinical Hematology	<p>WOS:000515630900014 SCOPUS H-INDEX:15 IF: 0.869 BIOXBIO (2018/2019)</p>
180.	<p>George, G., Varsha, A. V., Philip, M. A., Vithayathil, R., Srinivasan, D., Sneha Princy, F. X. and Sahajanandan, R.</p>	INT	JUL TO DEC	Anesthesia, Cardiothoracic Surgery, Biostatistics	PMID: 33109807

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Myocardial protection in cardiac surgery: Del Nido versus blood cardioplegia Ann Card Anaesth; 2020, 23 (4): 477-484 Address: Department of Anesthesia, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Department of Cardiothoracic Surgery, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Department of Biostatistics, Christian Medical College, Bagayam, Vellore, Tamil Nadu, India.</p> <p>OBJECTIVES: del Nido cardioplegia which was traditionally used for myocardial protection in pediatric congenital heart surgery is now being extensively utilized in adult cardiac surgery. The aim of this study was to compare the safety and efficacy of del Nido cardioplegia (DNC) with blood cardioplegia (BC). MATERIALS AND METHODS: This is a historical cohort study using secondary data. Two hundred and eighty six patients who underwent coronary artery bypass graft (CABG) or valve surgery were included. They were divided into 2 matched cohorts of which 143 patients received BC and 143 patients received DNC. RESULTS: There was no difference in cardiopulmonary bypass time (P = 0.516) and clamp time (P = 0.650) between the groups. The redosing of cardioplegia was significantly less for DNC (1.13 vs. 2.35, P = <0.001). The post bypass hemoglobin was higher for DNC (9.1 vs. 8.7, P = 0.011). The intraoperative and postoperative blood transfusion was comparable (P = 0.344) (P = 0.40). The incidence of clamp release ventricular fibrillation (P = 0.207) was similar. The creatine kinase-MB isotype levels for the CABG patients were comparable on all 3 days (P = 0.104), (P = 0.106), and (P = 0.158). The postoperative left ventricle ejection fraction was lesser but within normal range in the DNC group (53.4 vs. 56.0, P = <0.001). The duration of ventilation (P = 0.186), ICU days (P = 0.931), and postoperative complications (P = 0.354) were comparable. There was no 30-day mortality or postoperative myocardial infarction in both the groups. CONCLUSION: DNC provides equivalent myocardial protection, efficacy, and surgical workflow and had comparable clinical outcomes to that of BC. This study shows that DNC is a safe alternate to BC in CABG and valve surgeries.</p>				
181.	<p>George, K., Cherian, K. E., Jebasingh, F. K. and Paul, T. V. Neglected foreign body in the foot of a patient with severe diabetic neuropathy BMJ Case Rep; 2020, 13 (6): Address: Endocrinology, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. Endocrinology, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India thomasypaul@yahoo.com.</p>	INT	JAN TO JUN	Endocrinology	<p>PMID:32554454 PMC ID: PMC7304634 H-INDEX:22 IF: 0.440 BIOXBIO (2018/2019)</p>
182.	<p>George, P., Mani, S., Abraham, P. and Michael, R. C. The Association of Human Papillomavirus in Benign and Malignant Laryngeal Lesions—a Pilot Study Indian Journal of Surgical Oncology; 2020, Address: Department of Head and Neck surgery, Christian Medical College</p>	NAT	JAN TO JUN	Clinical Virology	<p>SCOPUS H-INDEX:14 IF: 0.610 RESURCHIFY (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Hospital, Vellore, 632004, India Department of Clinical Virology, Christian Medical College Hospital, Vellore, 632004, India</p> <p>Various etiological factors have been described in laryngeal carcinogenesis. Tobacco and alcohol play a major role in the development of laryngeal cancers. However, recently there has been an overshadowing of association of human papillomavirus infection in laryngeal cancers. The aim of this study is to assess the prevalence of human papillomavirus (HPV) in malignant laryngeal lesions. This is a case control study. We conducted this study using tumor tissue specimens from 30 laryngeal squamous cell carcinoma patients and benign laryngeal tissue specimens from 30 cancer-free controls. The specimens from the lesion were sent to histopathological analysis as well as DNA extraction (DNeasy® Tissue kit) and polymerase chain reaction for detection of HPV. Positive samples underwent sequencing to detect the HPV serotype. Statistical analysis was performed using SPSS software. All 30 benign laryngeal lesion specimens were negative for the HPV DNA, while 4 of the 30 (7.5%) squamous cell carcinoma lesions were positive. One was HPV 16 and another one HPV 11. Two positive cases were not able to be sequenced probably due to low viral load. Our study suggests that the proportion of laryngeal squamous cell carcinomas attributable to infection by HPV seems to be low. Further prospective studies should be conducted with a larger group of patients to confirm the role of HPV in laryngeal cancers especially in treatment response and survival. © 2020, Indian Association of Surgical Oncology.</p>				
183.	<p>George, P., Mani, S., Telugu, R. B. and Michael, R. C. Management of the Thyroid Gland in Papillary Carcinoma of the Thyroglossal Cyst: A Case Report JNMA J Nepal Med Assoc; 2020, 58 (227): 497-500 Address: Department of Head and Neck Surgery, Christian Medical College, Vellore, India. Department of Pathology, Christian Medical College, Vellore, India.</p> <p>Carcinoma arising in a thyroglossal cyst is rare. We present a case of anterior neck swelling diagnosed to be thyroglossal cyst clinically which turns out to be a papillary carcinoma arising in thyroglossal cyst. She underwent sistrunk procedure with total thyroidectomy and diseasefree on follow up evaluation. Even though preoperative ultrasonography had shown thyroid nodule, the final histology did not show malignancy. There is a paucity of clear-cut guidelines in the management of the thyroid gland in a thyroglossal cyst carcinoma. In thyroglossal cyst carcinoma cases, we recommend thyroidectomy only when there is a thyroid nodule with high-risk features.</p>	INT	JUL TO DEC	Head and Neck Surgery, Pathology	PMID: 32827013 PMC:7580406
184.	<p>George, R., George, A. and Kumar, T. S. Update on Management of Morphea (Localized Scleroderma) in Children Indian Dermatol Online J; 2020, 11 (2): 135-145</p>	NAT	JAN TO JUN	Dermatology, Child Health	PMID:32477969 PMC ID: PMC7247622 H-INDEX:NA IF: NA

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Address: Department of Dermatology, Venereology and Leprosy, Christian Medical College, Vellore, Tamil Nadu, India. Department of Child Health, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Juvenile localized scleroderma (morphea) is the predominant scleroderma in childhood which affects the skin and may extend to the underlying fascia, muscle, joints and bone. The assessment of activity and damage can be done with a validated instrument like LoSCAT. Disease classified as "low severity" which includes superficial plaque morphea can be treated with topical mid potent- potent steroids, tacrolimus, calcipotriol or imiquimod in combination with phototherapy. Methotrexate is recommended for linear, deep and generalized morphea. Steroids are effective in the early inflammatory stage and used in combination with methotrexate. Methotrexate is continued for at least 12 months after adequate response is achieved. Mycophenolate mofetil is given in cases where methotrexate is contraindicated or for those who do not respond to methotrexate. There are also reports of improvement of disease with ciclosporine and hydroxychloroquine. In severe cases, recalcitrant to standard therapy there may be a role for biologics, JAK inhibitors, and IVIG. Supportive measures like physiotherapy and psychiatric counseling are also important in the management of morphea. Orthopedic surgery and other measures like autologous fat transfer may be advocated once the disease is inactive.</p>				
185.	<p>George, R., Prasoona, T. S., Kandasamy, R., Murali, S., Rekha, R. and Mani, T. Learning Curve, Survival Curve JCO Glob Oncol; 2020, 6 571-574</p> <p>Address: Palliative Care Unit, Christian Medical College, Vellore, Tamil Nadu, India. Department of Continuing Medical Education, Christian Medical College, Vellore, Tamil Nadu, India. Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>manuscript. All relationships are considered compensated unless otherwise noted. Relationships are self-held unless noted. I = Immediate Family Member, Inst = My Institution. Relationships may not relate to the subject matter of this manuscript. For more information about ASCO's conflict of interest policy, please refer to www.asco.org/rwc or ascopubs.org/go/site/misc/authors.html. Open Payments is a public database containing information reported by companies about payments made to US-licensed physicians (Open Payments). No potential conflicts of interest were reported.</p>	INT	JAN TO JUN	Palliative Care Unit, Continuing Medical Education, Biostatistics	<p>PMID:32282233 PMC ID: PMC7193773 SCOPUS H-INDEX:NA IF: 1.790 RESURCHIFY (2018/2019)</p>
186.	<p>George, T., Carey, R. A. B., Abraham, O. C., Sebastian, T. and Faith, M. F. Trainee doctors in medicine prefer case-based learning compared to didactic</p>	NAT	JAN TO JUN	Medical Education, Medicine	<p>PMID:32318385 PMC ID: PMC7113923</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>teaching J Family Med Prim Care; 2020, 9 (2): 580-584</p> <p>Address: Department of Medicine and Medical Education, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND: Sustaining interest and promoting deep learning is a challenge in any teaching method. The purpose of the study is to find the perception of trainee doctors in Internal Medicine and teaching faculty on the usefulness of case-based learning (CBL) and to compare assessment knowledge outcome with didactic seminars. METHODS AND MATERIALS: We developed and conducted a CBL teaching program on eight topics in infectious diseases. First group had CBL and second group had didactic seminars. In step 1, a clinical case was introduced in stages. Learning objectives were formulated and topics were divided among the trainees. At step 2, trainees shared what they had learnt from self-directed learning. Faculty summarized the case and learning points. In the seminar group, trainees made presentations on the given topics. Trainees who had CBL underwent a questionnaire survey. Multiple choice questions-based test was administered for both the groups. RESULTS: The trainee doctors and staff overwhelmingly found CBL to be more interesting, stimulating, and useful compared to didactic seminars. There was no statistical difference in the test scores. CONCLUSIONS: CBL is a useful and interesting method of learning and should be employed more often in teaching for trainee doctors.</p>				H-INDEX:NA IF: 0.210 RG (2018/2019)
187.	<p>Ghosh, D., Veeraraghavan, B., Elangovan, R. and Vivekanandan, P. Antibiotic Resistance and Epigenetics: More to It than Meets the Eye Antimicrobial Agents and Chemotherapy; 2020, 64 (2): 16</p> <p>Address: [Ghosh, Dipannita; Vivekanandan, Perumal] Indian Inst Technol Delhi, Kusuma Sch Biol Sci, New Delhi, India. [Veeraraghavan, Balaji] Christian Med Coll & Hosp, Dept Clin Microbiol, Vellore, Tamil Nadu, India. [Elangovan, Ravikrishnan] Indian Inst Technol Delhi, Dept Biochem Engn & Biotechnol, New Delhi, India. Vivekanandan, P (reprint author), Indian Inst Technol Delhi, Kusuma Sch Biol Sci, New Delhi, India.; Elangovan, R (reprint author), Indian Inst Technol Delhi, Dept Biochem Engn & Biotechnol, New Delhi, India. elangovan@dbeb.iitd.ac.in; vperumal@bioschool.iitd.ac.in</p> <p>The discovery of antibiotics in the last century is considered one of the most important achievements in the history of medicine. Antibiotic usage has significantly reduced morbidity and mortality associated with bacterial infections. However, inappropriate use of antibiotics has led to emergence of antibiotic resistance at an alarming rate. Antibiotic resistance is regarded as a major health care challenge of this century. Despite extensive research, well-documented biochemical mechanisms and genetic changes fail to fully explain mechanisms</p>	INT	JAN TO JUN	Clinical Microbiology	WOS:000509748200050 SCOPUS H-INDEX:247 IF: 4.715 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	underlying antibiotic resistance. Several recent reports suggest a key role for epigenetics in the development of antibiotic resistance in bacteria. The intrinsic heterogeneity as well as transient nature of epigenetic inheritance provides a plausible backdrop for high-paced emergence of drug resistance in bacteria. The methylation of adenines and cytosines can influence mutation rates in bacterial genomes, thus modulating antibiotic susceptibility. In this review, we discuss a plethora of recently discovered epigenetic mechanisms and their emerging roles in antibiotic resistance. We also highlight specific epigenetic mechanisms that merit further investigation for their role in antibiotic resistance.				
188.	<p>Ghosh, S., Roy, K., Rajalingam, R., Martin, S. and Pal, C.</p> <p>Cytokines in the generation and function of regulatory T cell subsets in leishmaniasis Cytokine; 2020, 155266</p> <p>Address: Cellular Immunology and Experimental Therapeutics Laboratory, Department of Zoology, West Bengal State University, Barasat, 24 Parganas (North), West Bengal, India. Immune Cell Engineering and Therapy Lab, Center for Stem Cell Research, Christian Medical College, Vellore, Tamil Nadu, India. Immune Cell Engineering and Therapy Lab, Center for Stem Cell Research, Christian Medical College, Vellore, Tamil Nadu, India. Electronic Address: sunil.martin@cmcvellore.ac.in.</p> <p>Cellular Immunology and Experimental Therapeutics Laboratory, Department of Zoology, West Bengal State University, Barasat, 24 Parganas (North), West Bengal, India. Electronic Address: chiranjibpal.zoology@wbsu.ac.in.</p> <p>CD4(+) T regulatory cells (Tregs) are a group of T lymphocytes that maintain self-tolerance and protect the host from inflammation-induced tissue damage. An interacting network of cytokines and transcription factors influence the origin, differentiation, and function of the Tregs in primary and secondary lymphoid organs. However, following antigenic stimulation, it can also be induced at the sites of infection. Immune cell resident microbial pathogens, such as Leishmania, employ varieties of mechanisms to promote the suppressive functions of Tregs for protective evasion from the host immune system. This establishes a state of immune unresponsiveness in the host, exacerbating the disease in Leishmania infection. Elimination of Leishmania pathogens is accomplished with a strong pro-inflammatory response accompanied by the release of host protective cytokines such as Interleukin-2 (IL-2), Interferon-gamma (IFN-γ), and Tumor necrosis factor-alpha (TNF-α), which functions through suppression of Tregs or making the effector cells recalcitrant to Treg mediated suppression. Nevertheless, during chronic infection, the persistence of unwarranted pro-inflammatory cytokines can trigger self-tissue damage. Tregs limit the consequence of chronic inflammation to restrict self-harm suggesting its mutually opposing role in host protection. Furthermore, Tregs function to prevent complete parasite clearance to provide long-term immunity to re-infection. This review summarizes the roles of pro-</p>	INT	JUL TO DEC	Center for Stem Cell Research	PMID: 32888774

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	inflammatory and anti-inflammatory cytokines involved in the homing, activation, differentiation, and suppression of Tregs in the course of Leishmania infection. We also suggest cytokines that can be modulated as potential therapeutic targets to treat Leishmania infection.				
189.	<p>Gieles, N. C., Mutsaerts, E. A. M. L., Kwatra, G., Bont, L., Cutland, C. L., Jones, S., Moultrie, A., Madhi, S. A. and Nunes, M. C. Rubella seroprevalence in pregnant women living with and without HIV in Soweto, South Africa International Journal of Infectious Diseases; 2020, 91 255-260</p> <p>Address: Medical Research Council: Respiratory and Meningeal Pathogens Research Unit, School of Pathology, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa Department of Science and Technology/National Research Foundation: Vaccine Preventable Diseases Unit, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa Julius Global Health, Julius Centre for Health Sciences and Primary Care, University Medical Centre Utrecht, Utrecht University, Utrecht, Netherlands Department of Clinical Microbiology, Christian Medical College, Vellore, India Division of Infectious Diseases, Department of Paediatrics, University Medical Centre Utrecht, Utrecht, Netherlands</p> <p>Objectives: Rubella infection during pregnancy may cause foetal death or congenital rubella syndrome. In South Africa, the national public immunization programme does not include rubella vaccination. The aim of this study was to evaluate rubella sero-epidemiology in pregnant South African women living with and without HIV. Methods: Serum samples obtained from women living with HIV (n = 552) and without HIV (n = 552) were tested for rubella immunoglobulin G antibodies using an ELISA. The proportions of women with seronegative titres (<8 IU/ml) and seropositive titres (≥11 IU/ml), and geometric mean titres (GMT) were compared by age group and HIV status. Results: The overall proportion of rubella seropositivity was 97.8%. The proportion of seropositive women increased with age group (18–25 years: 97.0%; 26–32 years: 97.7%; 33–40 years: 99.3%; p = 0.047 after adjusting for HIV status). Similar proportions of women living with and without HIV were seropositive. Conclusions: Rubella immunity was high among South African pregnant women living with and without HIV in the absence of rubella vaccination in the public immunization programme. However, a lower percentage of younger women had seropositive titres, indicating the need for routine rubella vaccination after an increase in vaccine coverage rates. © 2019 The Authors</p>	INT	JAN TO JUN	Clinical Microbiology	WOS:000510867100043 SCOPUS H-INDEX:142 IF: 8.547 BIOXBIO (2018/2019)
190.	<p>Gieles, N. C., Mutsaerts, E. A. M. L., Kwatra, G., Bont, L., Cutland, C. L., Jones, S., Moultrie, A., Madhi, S. A. and Nunes, M. C. Measles seroprevalence in pregnant women in Soweto, South Africa: a nested</p>	INT	JAN TO JUN	Clinical Microbiology	WOS:000523559800026 SCOPUS H-INDEX:79

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>cohort study Clinical Microbiology and Infection; 2020, 26 (4): 515.e1-515.e4</p> <p>Address: Medical Research Council: Respiratory and Meningeal Pathogens Research Unit, School of Pathology, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa Department of Science and Technology/National Research Foundation: Vaccine Preventable Diseases Unit, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa Julius Global Health, Julius Centre for Health Sciences and Primary Care, University Medical Centre Utrecht, Utrecht University, Utrecht, Netherlands Department of Clinical Microbiology, Christian Medical College, Vellore, India Division of Infectious Diseases, Department of Paediatrics, University Medical Centre Utrecht, Utrecht, Netherlands</p> <p>Objectives: Measles infection causes particularly severe disease in young children who, prior to vaccination, are dependent on maternal antibodies for protection against infection. Measles vaccination was introduced into the South African public immunization programme in 1983 and became widely available in 1992. The aim of this study was to determine measles-specific immunoglobulin G (IgG) levels in pregnant women living with and without HIV born before and after measles vaccine introduction in South Africa. Methods: Measles IgG antibody level from blood obtained at the time of delivery was compared between women who were born before 1983 (n = 349) and since 1992 (n = 349). Serum samples were tested for measles IgG antibody using an enzyme-linked immunosorbent assay. Geometric mean titres (GMTs) and the proportion with seronegative (<200 mIU/mL) or seropositive titres (≥275 mIU/mL) were compared. Results: Women born since 1992 had lower GMTs [379.7 mIU/mL (95% CI 352.7–448.6)] and fewer were seropositive (55.9%, 195/349) than women born before 1983 [905.8 mIU/mL (95% CI 784.7–1045.5); 76.8%, 268/349], for both comparisons p < 0.001. Conclusions: We found an association between measles vaccine implementation into the public immunization program in South Africa and peri-partum maternal measles immunity, where women born before vaccine introduction had higher measles IgG antibody titres and were more likely to be seropositive. These findings suggest a need to reconsider the infant measles immunization schedule in settings where women have derived immunity mainly from measles vaccine rather than wild-type virus exposure. © 2019 European Society of Clinical Microbiology and Infectious Diseases</p>				IF: 3.538 BIOXBIO (2018/2019)
191.	Gladstone, R. A., Lo, S. W., Goater, R., Yeats, C., Taylor, B., Hadfield, J., Lees, J. A., Croucher, N. J., Van Tonder, A. J., Bentley, L. J., Quah, F. X., Blaschke, A. J., Pershing, N. L., Byington, C. L., Balaji, V., Hryniewicz, W., Sigauque, B., Ravikumar, K. L., Almeida, S. C. G., Ochoa, T. J., Ho, P. L., Du Plessis, M., Ndlangisa, K. M., Cornick, J. E., Kwambana-Adams, B., Benisty, R., Nzenze, S. A., Madhi, S. A., Hawkins, P. A., Pollard,	INT	JAN TO JUN	Clinical Microbiology	SCOPUS H-INDEX:21 IF: 5.520 RESURCHIFY (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>A. J., Everett, D. B., Antonio, M., Dagan, R., Klugman, K. P., Von Gottberg, A., Metcalf, B. J., Li, Y., Beall, B. W., Mcgee, L., Breiman, R. F., Aanensen, D. M., Bentley, S. D. and The Global Pneumococcal Sequencing, Consortium Visualizing variation within global pneumococcal sequence clusters (GPSCS) and country population snapshots to contextualize pneumococcal isolates Microbial Genomics; 2020, 6 (5): 1-13</p> <p>Address: Parasites and microbes, Wellcome Sanger Institute, Hinxton, United Kingdom Centre for Genomic Pathogen Surveillance, Wellcome Genome Campus, Hinxton, United Kingdom Big Data Institute, Li Ka Shing Centre for Health Information and Discovery, University of Oxford, Oxford, United Kingdom Vaccine and Infectious Disease Division, Fred Hutchinson Cancer Research Center, Seattle, WA, United States Faculty of Medicine, School of Public Health, Imperial College London, United Kingdom Department of Veterinary Medicine, University of Cambridge, Cambridge, United Kingdom Division of Pediatric Infectious Diseases, Department of Pediatrics, School of Medicine, University of Utah, 295 Chipeta Way, Salt Lake City, UT 84108, United States University of California Health, Oakland, CA, United States Christian Medical College, Vellore, India National Medicines Institute, Division of Clinical Microbiology and Infection Prevention, Warsaw, Poland Fundação Manhiça, Centro de Investigação em Saúde da Manhiça (CISM), Instituto Nacional de Saúde, Ministério de Saúde, Maputo, Mozambique Central Research Laboratory, Department of Microbiology, Kempegowda Institute of Medical Sciences Hospital & Research Center, Bangalore, India Center of Bacteriology, Adolfo Lutz Institute, São Paulo, Brazil Instituto de Medicina Tropical, Universidad Peruana Cayetano Heredia, Lima, Peru Department of Microbiology and Carol Yu Centre for Infection, The University of Hong Kong, Queen Mary Hospital, Hong Kong Centre for Respiratory Diseases and Meningitis, National Institute for Communicable Diseases, Johannesburg, South Africa Malawi-Liverpool-Wellcome-Trust, Malawi NIHR Global Health Research Unit on Mucosal Pathogens, Division of Infection and Immunity, University College London, London, United Kingdom WHO Collaborating Centre for New Vaccines Surveillance, Medical Research Council Unit The Gambia at The London School of Hygiene & Tropical Medicine, Fajara, Gambia The Faculty of Health Sciences, Ben-Gurion University of the Negev, Beer-Sheva, Israel</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Medical Research Council: Respiratory and Meningeal Pathogens Research Unit, University of the Witwatersrand, Johannesburg, South Africa Department of Science and Technology/National Research Foundation: Vaccine Preventable Diseases, University of the Witwatersrand, Johannesburg, South Africa Rollins School Public Health, Emory UniversityGA, United States Oxford Vaccine Group, Department of Paediatrics, University of Oxford, NIHR Oxford Biomedical Research Centre, Oxford, United Kingdom Queens Research Institute, University of Edinburgh, United Kingdom Centers for Disease Control and Prevention, Atlanta, GA, United States Emory Global Health Institute, Atlanta, GA, United States</p> <p>Knowledge of pneumococcal lineages, their geographic distribution and antibiotic resistance patterns, can give insights into global pneumococcal disease. We provide interactive bioinformatic outputs to explore such topics, aiming to increase dissemination of genomic insights to the wider community, without the need for specialist training. We prepared 12 country-specific phylogenetic snapshots, and international phylogenetic snapshots of 73 common Global Pneumococcal Sequence Clusters (GPSCs) previously defined using PopPUNK, and present them in Microreact. Gene presence and absence defined using Roary, and recombination profiles derived from Gubbins are presented in Phandango for each GPSC. Temporal phylogenetic signal was assessed for each GPSC using BactDating. We provide examples of how such resources can be used. In our example use of a country-specific phylogenetic snapshot we determined that serotype 14 was observed in nine unrelated genetic backgrounds in South Africa. The international phylogenetic snapshot of GPSC9, in which most serotype 14 isolates from South Africa were observed, highlights that there were three independent sub-clusters represented by South African serotype 14 isolates. We estimated from the GPSC9-dated tree that the sub-clusters were each established in South Africa during the 1980s. We show how recombination plots allowed the identification of a 20 kb recombination spanning the capsular polysaccharide locus within GPSC97. This was consistent with a switch from serotype 6A to 19A estimated to have occurred in the 1990s from the GPSC97-dated tree. Plots of gene presence/absence of resistance genes (tet, erm, cat) across the GPSC23 phylogeny were consistent with acquisition of a composite transposon. We estimated from the GPSC23-dated tree that the acquisition occurred between 1953 and 1975. Finally, we demonstrate the assignment of GPSC31 to 17 externally generated pneumococcal serotype 1 assemblies from Utah via Pathogenwatch. Most of the Utah isolates clustered within GPSC31 in a USA-specific clade with the most recent common ancestor estimated between 1958 and 1981. The resources we have provided can be used to explore to data, test hypothesis and generate new hypotheses. The accessible assignment of GPSCs allows others to contextualize their own collections beyond the data presented here. © 2020, Microbiology Society. All rights reserved.</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
192.	<p>Gnanamuthu, B. R., Vimala, L. R. and Mallampati, S. Mediastinal teratoma presenting as a cervical tumor: images Indian J Thorac Cardiovasc Surg; 2020, 36 (5): 552-554 Address: The Department of CTVS, CMC Hospital, The Christian Medical College, Vellore, Tamil Nadu 632004 India. GRID: grid.11586.3b. ISNI: 0000 0004 1767 8969 The Department of Radiology, The Christian Medical College, Vellore, Tamil Nadu 632004 India. GRID: grid.11586.3b. ISNI: 0000 0004 1767 8969 Benign extra-gonadal germ cell tumors, known as teratoma or dermoid cysts, are commonly found in the anterior mediastinum in association with the thymic gland. This association is due to their common site of embryological origins, from the third and the fourth pharyngeal pouches. Since it is not unusual to find normal thymic tissue in the neck, germ cell tumors arising from here will present as a cervical tumor. We submit the typical images of one such tumor in a young adult. Intraoperatively, the tumor was well encapsulated and was connected to the mediastinal thymus by a long pedicle of thymic tissue. It was not related to the thyroid gland unlike a primary cervical teratoma. We present these typical images of a mediastinal dermoid in this unusual cervical location. The differential diagnoses to be considered clinically are primary cervical teratomas, thyroid tumors, lymph nodal pathologies, and branchial cyst.</p>	NAT	JUL TO DEC	Cardiothoracic Vascular Surgery, Radiology	<p>PMID: 33061175 PMC:7525543</p>
193.	<p>Gnanaraj, R., Lionel, B. A. P., Paranjape, M., Moses, P. D., John, J., Geethanjali, F. S. and Rose, W. Vitamin-D deficiency and its association with breast feeding among children at 1 year of age in an urban community in South India J Family Med Prim Care; 2020, 9 (3): 1668-1671 Address: Department of Pediatrics, Christian Medical College Hospital, Vellore, Tamil Nadu, India. The Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences, Christian Medical College, Vellore, Tamil Nadu, India. Department of Community Medicine, Christian Medical College Hospital, Vellore, Tamil Nadu, India. Department of Clinical Biochemistry, Christian Medical College Hospital, Vellore, Tamil Nadu, India.</p> <p>CONTEXT: High prevalence of Vitamin D deficiency is reported among healthy infants, children and adolescents. Maternal Vitamin-D deficiency, poor vitamin-D content of breast milk even in Vitamin-D replete mothers, exclusive breastfeeding without Vitamin-D supplementation and inadequate sunlight exposure are important risk factors for Vitamin D deficiency in infants. AIM: To determine the prevalence of hypovitaminosis-D and its relation with breast feeding and childhood illness among healthy infants at 1 year of age. SETTINGS AND DESIGN: A prospective cohort study was conducted among the infants in an urban community</p>	NAT	JAN TO JUN	Pediatrics, Wellcome Trust Research Laboratory, Commuknity Medicine, Clinical Biochemistry	<p>PMID:32509669 PMC ID: PMC7266232 H-INDEX:NA IF: 0.210 RG (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	in south India. METHODS AND MATERIAL: A total of 495 children were followed up at 1 year of age. Clinical history, anthropometric measurements, and serum blood samples for vitamin-D were obtained. The effects of breastfeeding duration and infections on Vitamin-D status were assessed by univariate and multivariate analysis. RESULTS: The prevalence of Vitamin D deficiency was 22% in these infants. Univariate analysis showed risk of hypovitaminosis-D in children breast fed for more than 6 months (p 0.02); however, multivariate analysis did not prove an association. Other risk factors analysed were not significantly associated with Hypovitaminosis D. CONCLUSION: The prevalence of hypovitaminosis-D in this study was low compared to previous studies from India. This study emphasizes the issue of hypovitaminosis-D in otherwise normal children. Routine Vitamin-D supplementation for antenatal women and infants may be needed to overcome this public health problem.				
194.	<p>Goel, A., Khanna, A., Mehrzad, H., Bach, S., Karkhanis, S., Kamran, U., Morgan, J., Rajoriya, N. and Tripathi, D. Portal decompression with transjugular intrahepatic portosystemic shunt prior to nonhepatic surgery: a single-center case series Eur J Gastroenterol Hepatol; 2020,</p> <p>Address: Liver Unit, University Hospitals Birmingham NHS Foundation Trust, Birmingham, UK. Department of Hepatology, Christian Medical College, Vellore, India. Institute of Liver Sciences, King's College Hospital, London. Institute of Cellular Medicine and Liver Immunology, Newcastle University, Newcastle. Department of Interventional Radiology. Department of Surgery, University Hospitals Birmingham NHS Foundation Trust. NIHR Birmingham Biomedical Research Centre, University Hospitals Birmingham NHS Foundation Trust and University of Birmingham. Institute of Immunology and Immunotherapy, University of Birmingham, Birmingham, UK.</p> <p>BACKGROUND AND AIMS: Cirrhosis increases perioperative and postoperative mortality in nonhepatic surgery. Transjugular intrahepatic portosystemic shunt (TIPSS), by reducing portal pressure, may reduce intraoperative bleeding and postoperative decompensation. We report our experience of prophylactic TIPSS in nonhepatic surgery. METHODS: Patients who underwent prophylactic TIPSS before nonhepatic surgery were identified from database with retrospective data collection via an e-patient record system. Primary outcome was discharged without hepatic decompensation after a planned surgery. RESULTS: Twenty-one patients [age (median, range): 55, 33-76 years, Child's score: 6, 5-9] who underwent prophylactic TIPSS before nonhepatic surgery over a period of 9 years were included. All patients underwent successful TIPSS with a reduction in portal</p>	INT	JUL TO DEC	Hepatology	PMID:33323758

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	pressure gradient from 21.5 (11-35) to 16 (7-25) mmHg (P < 0.001). Immediate post-TIPSS complications were seen in 7 (33%) patients including hepatic encephalopathy in four. Eighteen patients (86%) underwent planned surgical intervention. Significant postoperative complications included hepatic encephalopathy (3), sepsis (2) and bleed (1). Two patients died postoperatively with multi-organ failure. The primary outcome was achieved in 12 (57%) patients. Post-TIPSS portal pressure gradient was significantly higher in patients with the adverse primary outcome. Over a follow-up period of 11 (1-78) months; 1-, 6- and 12-months' survival was 90, 80 and 76%, respectively. CONCLUSION: Prophylactic TIPSS is associated with complications in up to one-third of patients, with 57% achieving the primary outcome. Careful patient selection in a multidisciplinary team setting is essential. Multicentre studies are necessary before the universal recommendation of prophylactic TIPSS.				
195.	<p>Goel, R., Gribbons, K. B., Carette, S., Cuthbertson, D., Hoffman, G. S., Joseph, G., Khalidi, N. A., Koenig, C. L., Kumar, S., Langford, C., Maksimowicz-Mckinnon, K., McAlear, C. A., Monach, P. A., Moreland, L. W., Nair, A., Pagnoux, C., Quinn, K. A., Ravindran, R., Seo, P., Sreih, A. G., Warrington, K. J., Ytterberg, S. R., Merkel, P. A., Danda, D. and Grayson, P. C.</p> <p>Derivation of an angiographically based classification system in Takayasu's arteritis: an observational study from India and North America Rheumatology; 2020, 59 (5): 1118-1127</p> <p>Address: [Goel, Ruchika; Kumar, Sathish; Nair, Aswin; Danda, Debashish] Christian Med Coll & Hosp, Dept Clin Immunol & Rheumatol, Vellore, Tamil Nadu, India. [Gribbons, K. Bates; Quinn, Kaitlin A.; Grayson, Peter C.] NIAMS, Syst Autoimmun Branch, NIH, Bethesda, MD USA. [Carette, Simon] Univ Toronto, Mt Sinai Hosp, Div Rheumatol, Toronto, ON, Canada. [Cuthbertson, David; Pagnoux, Christian] Univ S Florida, Dept Biostat, Tampa, FL 33620 USA. [Hoffman, Gary S.; Langford, Carol] Cleveland Clin Fdn, Dept Rheumat & Immunol Dis, Cleveland, OH 44195 USA. [Joseph, George] Christian Med Coll & Hosp, Dept Cardiol, Vellore, Tamil Nadu, India. [Khalidi, Nader A.] McMaster Univ, Div Rheumatol, Hamilton, ON, Canada. [Koenig, Curry L.] Univ Utah, Div Rheumatol, Salt Lake City, UT USA. [Maksimowicz-McKinnon, Kathleen] Henry Ford Hlth Syst, Div Rheumatol, Detroit, MI USA. [McAlear, Carol A.; Sreih, Antoine G.; Merkel, Peter A.] Univ Penn, Div Rheumatol, Dept Biostat Epidemiol & Informat, Philadelphia, PA 19104 USA. [Monach, Paul A.] VA Boston Healthcare Syst, Div Rheumatol, Boston, MA USA. [Moreland, Larry W.] Univ Pittsburgh, Div Rheumatol, Pittsburgh, PA USA. [Quinn, Kaitlin A.] Georgetown Univ, Div Rheumatol, Washington, DC USA. [Ravindran, Raheesh] Hiranandani Hosp, Div Rheumatol, Mumbai, Maharashtra, India. [Seo, Philip] Johns Hopkins Univ, Div Rheumatol, Baltimore, MD USA. [Warrington, Kenneth J.; Ytterberg, Steven R.] Mayo Clin, Div Rheumatol, Rochester, MN USA. Grayson, PC (reprint author), NIAMS, NIH, 10 Ctr Dr, Bldg 10, 10N Rm 311D, Bethesda, MD 20892 USA. peter.grayson@nih.gov</p>	INT	JAN TO JUN	Clinical Immunology & Rheumatology	<p>WOS:000537433000029 SCOPUS H-INDEX:166 IF: 5.149 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Objectives. To develop and replicate, using data-driven methods, a novel classification system in Takayasu's arteritis based on distribution of arterial lesions. Methods. Patients were included from four international cohorts at major academic centres: India (Christian Medical College Vellore); North America (National Institutes of Health, Vasculitis Clinical Research Consortium and Cleveland Clinic Foundation). All patients underwent whole-body angiography of the aorta and branch vessels, with categorization of arterial damage (stenosis, occlusion or aneurysm) in 13 territories. K-means cluster analysis was performed to identify subgroups of patients based on pattern of angiographic involvement. Cluster groups were identified in the Indian cohort and independently replicated in the North American cohorts. Results. A total of 806 patients with Takayasu's arteritis from India (n = 581) and North America (n = 225) were included. Three distinct clusters defined by arterial damage were identified in the Indian cohort and replicated in each of the North American cohorts. Patients in cluster one had significantly more disease in the abdominal aorta, renal and mesenteric arteries (P < 0.01). Patients in cluster two had significantly more bilateral disease in the carotid and subclavian arteries (P < 0.01). Compared with clusters one and two, patients in cluster three had asymmetric disease with fewer involved territories (P < 0.01). Demographics, clinical symptoms and clinical outcomes differed by cluster. Conclusion. This large study in Takayasu's arteritis identified and replicated three novel subsets of patients based on patterns of arterial damage. Angiographic-based disease classification requires validation by demonstrating potential aetiological or prognostic implications.				
196.	Goel, R., Gribbons, K. B., Merkel, P. A., Danda, D. and Grayson, P. C. Comment on: Derivation of an angiographically based classification system in Takayasu's arteritis: reply Rheumatology (Oxford); 2020, 59 (5): 1184-1185 Address: Department of Clinical Immunology and Rheumatology, Christian Medical College, Vellore , India. Systemic Autoimmunity Branch, NIAMS, National Institutes of Health, Bethesda, MD. Division of Rheumatology, Department of Biostatistics, Epidemiology, and Informatics, University of Pennsylvania, Philadelphia, PA, USA.	INT	JAN TO JUN	Clinical Immunology & Rheumatology	PMID:31943122 WOS:000537433000042 SCOPUS H-INDEX:166 IF: 5.149 BIOXBIO (2018/2019)
197.	Gopalakrishnan, R. and Ravichandran, D. Sexual dysfunction in men with psychosis: Incidence and risk factors Indian Journal of Psychiatry; 2020, 62 S153-S154 Address: [Gopalakrishnan, Rajesh; Ravichandran, Dhananjayan] Christian Med Coll & Hosp , Dept Psychiat, Vellore , Tamil Nadu, India.	NAT	JAN TO JUN	Psychiatry	WOS:000540356200519 H-INDEX:30 IF: 1.500 RG (2018/2019)
198.	Gopalakrishnan, R. and Ravichandran, D. Sexual dysfunction in men with psychosis: Incidence and risk factors	NAT	JAN TO JUN	Psychiatry	WOS:000540356200545 H-INDEX:30

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Indian Journal of Psychiatry; 2020, 62 S161-S161 Address: [Gopalakrishnan, Rajesh; Ravichandran, Dhananjayan] Christian Med Coll & Hosp, Dept Psychiat, Vellore, Tamil Nadu, India.				IF: 1.500 RG (2018/2019)
199.	Groeneweg, S., Van Geest, F. S., Abaci, A., Alcantud, A., Ambegaonkar, G. P., Armour, C. M., Bakhtiani, P., Barca, D., Bertini, E. S., Van Beynum, I. M., Brunetti-Pierri, N., Bugiani, M., Cappa, M., Cappuccio, G., Castellotti, B., Castiglioni, C., Chatterjee, K., De Co, I. F. M., Coutant, R., Craiu, D., Crock, P., Degoede, C., Demir, K., Dica, A., Dimitri, P., Dolcetta-Capuzzo, A., Dremmen, M. H. G., Dubey, R., Enderli, A., Fairchild, J., Gallichan, J., George, B., Gevers, E. F., Hackenberg, A., Halász, Z., Heinrich, B., Huynh, T., Kłosowska, A., Van Der Knaap, M. S., Van Der Knoop, M. M., Konrad, D., Koolen, D. A., Krude, H., Lawson-Yuen, A., Lebl, J., Linder-Lucht, M., Lorea, C. F., Lourenço, C. M., Lunsing, R. J., Lyons, G., Malikova, J., Mancilla, E. E., MCGowan, A., Mericq, V., Lora, F. M., Moran, C., Müller, K. E., Oliver-Petit, I., Paone, L., Paul, P. G., Polak, M., Porta, F., Poswar, F. O., Reinauer, C., Rozenkova, K., Menevse, T. S., Simm, P., Simon, A., Singh, Y., Spada, M., Van Der Spek, J., Stals, M. A. M., Stoupa, A., Subramanian, G. M., Tonduti, D., Turan, S., Den Uil, C. A., Vanderniet, J., Van Der Walt, A., Wémeau, J. L., Wierzba, J., De Wit, M. C. Y., Wolf, N. I., Wurm, M., Zibordi, F., Zung, A., Zwaveling-Soonawala, N. and Visser, W. E. Disease characteristics of MCT8 deficiency: an international, retrospective, multicentre cohort study The Lancet Diabetes and Endocrinology; 2020, 8 (7): 594-605 Address: Academic Center For Thyroid Disease, Department of Internal Medicine, Erasmus Medical Center, Rotterdam, Netherlands Division of Pediatric Endocrinology, Faculty of Medicine, Dokuz Eylul University, İzmir, Turkey Pediatric Neurology Section, Hospital Francesc de Borja de Gandia, Valencia, Spain Department of Paediatric Neurology, Addenbrooke's Hospital, Cambridge University Hospitals NHS Foundation Trust, Cambridge, United Kingdom Regional Genetics Program, Children's Hospital of Eastern Ontario, Children's Hospital of Eastern Ontario Research Institute, University of Ottawa, Ottawa, ON, Canada University of Louisville, Louisville, KY, United States Paediatric Neurology Clinic, Alexandru Obregia Hospital, Bucharest, Romania Department of Neurosciences, Paediatric Neurology Discipline II, Carol Davila University of Medicine, Bucharest, Romania Unit of Neuromuscular and Neurodegenerative Disorders, Bambino Gesù' Children's Research Hospital IRCCS, Rome, Italy Division of Endocrinology, Bambino Gesù' Children's Research Hospital IRCCS, Rome, Italy Sophia Children's Hospital, Division of Paediatric Cardiology, Erasmus Medical Centre, Rotterdam, Netherlands	INT	JAN TO JUN	Pediatrics	SCOPUS H-INDEX:97 IF: 23.710 RESURCHIFY (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Department of Paediatric Neurology, Erasmus Medical Centre, Rotterdam, Netherlands</p> <p>Division of Paediatric Radiology, Erasmus Medical Centre, Rotterdam, Netherlands</p> <p>Department of Translational Medicine, Federico II University, Naples, Italy</p> <p>Telethon Institute of Genetics and Medicine, Pozzuoli, Naples, Italy</p> <p>Department of Child Neurology, Center for Childhood White Matter Diseases, Emma Children's Hospital, Amsterdam University Medical Centers, Vrije Universiteit Amsterdam, Amsterdam Neuroscience, Amsterdam, Netherlands</p> <p>Department of Pathology, Amsterdam Neuroscience, Amsterdam University Medical Centers, Vrije Universiteit Amsterdam, Amsterdam, Netherlands</p> <p>Unit of Medical Genetics and Neurogenetics, Fondazione IRCCS Istituto Neurologico Carlo Besta, Milan, Italy</p> <p>Departamento de Neurologia Pediátrica, Clínica Las Condes, Santiago, Chile</p> <p>Wellcome Trust-Medical Research Council Institute of Metabolic Science, University of Cambridge, Cambridge, United Kingdom</p> <p>Department of Pediatric Endocrinology and Diabetology, University Hospital, Angers, France</p> <p>John Hunter Children's Hospital and University of Newcastle, Newcastle, NSW, Australia</p> <p>Lancashire Teaching Hospitals NHS Trust, Lancashire, United Kingdom</p> <p>Sheffield Children's NHS Foundation Trust, Sheffield Hallam University and University of Sheffield, Sheffield, United Kingdom</p> <p>Università Vita-Salute San Raffaele, Milan, Italy</p> <p>Medanta Superspeciality Hospital, Indore, India</p> <p>Department of Neuropediatrics, University Children's Hospital Zurich, Zürich, Switzerland</p> <p>Department of Diabetes and Endocrinology, Women's and Children's Hospital, North Adelaide, SA, Australia</p> <p>Plymouth Hospitals NHS Trust, Plymouth, United Kingdom</p> <p>Department of Endocrinology, St. John's Medical College Hospital, Bengaluru, Karnataka, India</p> <p>Centre for Endocrinology, William Harvey Research institute, Queen Mary University London, London, United Kingdom</p> <p>Dept of Paediatric Endocrinology, Barts Health NHS Trust, London, United Kingdom</p> <p>Department of Paediatrics, Semmelweis University, Budapest, Hungary</p> <p>Department of Endocrinology & Diabetes, Queensland Children's Hospital, South Brisbane, QLD, Australia</p> <p>Department of Chemical Pathology, Mater Pathology, South Brisbane, QLD, Australia</p> <p>Faculty of Medicine, University of Queensland, Brisbane, QLD, Australia</p> <p>Medical University of Gdańsk, Department of Paediatrics, Haematology & Oncology, Department of General Nursery, Gdańsk, Poland</p> <p>Division of Pediatric Endocrinology and Diabetology and Children's Research</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Center, University Children's Hospital, Zurich, Switzerland</p> <p>Department of Human Genetics, Donders Institute for Brain, Cognition and Behaviour, Radboud University Medical Center (Radboudumc), Nijmegen, Netherlands</p> <p>Department of Paediatric Endocrinology and Diabetology, Charité-Universitätsmedizin Berlin, Berlin, Germany</p> <p>Genomics Institute Mary Bridge Children's Hospital, MultiCare Health System TacomaWA, United States</p> <p>Department of Paediatrics, Second Faculty of Medicine, Charles University, University Hospital Motol, Prague, Czech Republic</p> <p>Division of Neuropediatrics and Muscular Disorders, Department of Pediatrics and Adolescent Medicine, University Hospital Freiburg, Freiburg, Germany</p> <p>Teaching Hospital of Universidade Federal de Pelotas, Pelotas, Brazil</p> <p>Faculdade de Medicina, Centro Universitario Estácio de Ribeirão Preto, Ribeirão Preto, Brazil</p> <p>Department of Child Neurology, University Medical Center Groningen, University of Groningen, Groningen, Netherlands</p> <p>Division of Endocrinology and Diabetes, Children's Hospital of Philadelphia, Perelman School of Medicine, University of PennsylvaniaPA, United States</p> <p>Institute of Maternal and Child Research, University of Chile, Santiago, Chile</p> <p>Department of Pediatrics, Clinica Las Condes, Santiago, Chile</p> <p>Pediatric Endocrinology Group, Santa Catarina Hospital, São Paulo, Brazil</p> <p>University of Debrecen, Pediatric Institute, Debrecen, Hungary</p> <p>Department of Paediatric Endocrinology and Genetics, Children's Hospital, Toulouse University Hospital, Toulouse, France</p> <p>Department of Paediatrics, Christian Medical College, Vellore, India</p> <p>Paediatric Endocrinology, Diabetology and Gynaecology Department, Necker Children's University Hospital, Imagine Institute, Paris, France</p> <p>Department of Paediatrics, AOU Città della Salute e della Scienza di Torino, University of Torino, Torino, Italy</p> <p>Medical Genetics Service, Hospital de Clínicas de Porto Alegre, Porto Alegre, Brazil</p> <p>Department of General Pediatrics, Neonatology and Pediatric Cardiology, University Children's Hospital, Medical Faculty, Duesseldorf, Germany</p> <p>Marmara University School of Medicine Department of Pediatric Endocrinology, Istanbul, Turkey</p> <p>Royal Children's Hospital, Parkville, Melbourne, VIC, Australia</p> <p>Department of Paediatric Cardiology, Addenbrooke's Hospital, Cambridge University Hospitals NHS Foundation Trust, Cambridge, United Kingdom</p> <p>Child Neurology Unit, Fondazione IRCCS, Istituto Neurologico Carlo Besta, Milan, Italy</p> <p>Department of Cardiology and Intensive Care Medicine, Erasmus Medical Centre, Rotterdam, Netherlands</p> <p>Panorama Medical Centre, Cape Town, South Africa</p> <p>University of Lille, Lille, France</p>				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Department of Pediatrics and Adolescent Medicine, Faculty of Medicine, University of Freiburg, Freiburg im Breisgau, Germany KUNO Children's University Hospital, Campus St. Hedwig, University of Regensburg, Regensburg, Germany Paediatric Endocrinology Unit, Kaplan Medical Center, Rehovot, Israel Hebrew University of Jerusalem, Jerusalem, Israel Emma Children's Hospital, Department of Paediatric Endocrinology, Amsterdam UMC, University of Amsterdam, Amsterdam, Netherlands</p> <p>Background: Disordered thyroid hormone transport, due to mutations in the SLC16A2 gene encoding monocarboxylate transporter 8 (MCT8), is characterised by intellectual and motor disability resulting from cerebral hypothyroidism and chronic peripheral thyrotoxicosis. We sought to systematically assess the phenotypic characteristics and natural history of patients with MCT8 deficiency. Methods: We did an international, multicentre, cohort study, analysing retrospective data from Jan 1, 2003, to Dec 31, 2019, from patients with MCT8 deficiency followed up in 47 hospitals in 22 countries globally. The key inclusion criterion was genetically confirmed MCT8 deficiency. There were no exclusion criteria. Our primary objective was to analyse the overall survival of patients with MCT8 deficiency and document causes of death. We also compared survival between patients who did or did not attain full head control by age 1-5 years and between patients who were or were not underweight by age 1-3 years (defined as a bodyweight-for-age Z score <-2 SDs or <5th percentile according to WHO definition). Other objectives were to assess neurocognitive function and outcomes, and clinical parameters including anthropometric characteristics, biochemical markers, and neuroimaging findings. Findings: Between Oct 14, 2014, and Jan 17, 2020, we enrolled 151 patients with 73 different MCT8 (SLC16A2) mutations. Median age at diagnosis was 24.0 months (IQR 12.0-60.0, range 0.0-744.0). 32 (21%) of 151 patients died; the main causes of mortality in these patients were pulmonary infection (six [19%]) and sudden death (six [19%]). Median overall survival was 35.0 years (95% CI 8.3-61.7). Individuals who did not attain head control by age 1.5 years had an increased risk of death compared with patients who did attain head control (hazard ratio [HR] 3.46, 95% CI 1.76-8.34; log-rank test p=0.0041). Patients who were underweight during age 1-3 years had an increased risk for death compared with patients who were of normal bodyweight at this age (HR 4.71, 95% CI 1.26-17.58, p=0.021). The few motor and cognitive abilities of patients did not improve with age, as evidenced by the absence of significant correlations between biological age and scores on the Gross Motor Function Measure-88 and Bayley Scales of Infant Development III. Tri-iodothyronine concentrations were above the age-specific upper limit in 96 (95%) of 101 patients and free thyroxine concentrations were below the age-specific lower limit in 94 (89%) of 106 patients. 59 (71%) of 83 patients were underweight. 25 (53%) of 47 patients had elevated systolic blood pressure above the 90th percentile, 34 (76%) of 45 patients had premature atrial contractions, and 20 (31%) of 64 had resting</p>				

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	tachycardia. The most consistent MRI finding was a global delay in myelination, which occurred in 13 (100%) of 13 patients. Interpretation: Our description of characteristics of MCT8 deficiency in a large patient cohort reveals poor survival with a high prevalence of treatable underlying risk factors, and provides knowledge that might inform clinical management and future evaluation of therapies. Funding: Netherlands Organisation for Health Research and Development, and the Sherman Foundation. © 2020 Elsevier Ltd				
200.	<p>Gummidi, B., John, O., Ghosh, A., Modi, G. K., Sehgal, M., Kalra, O. P., Kher, V., Muliylil, J., Thakur, J. S., Ramakrishnan, L., Pandey, C. M., Sivakumar, V., Dhaliwal, R. S., Khanna, T., Kumari, A., Prasadini, G., Reddy, J. C., Reddy, J. and Jha, V.</p> <p>A Systematic Study of the Prevalence and Risk Factors of CKD in Uddanam, India Kidney International Reports; 2020, 5 (12): 2246-2255</p> <p>Address: [Gummidi, Balaji; John, Oommen; Ghosh, Arpita] Univ New South Wales, George Inst Global Hlth, New Delhi, India. [John, Oommen; Ghosh, Arpita] Manipal Acad Higher Educ, Manipal, India. [Modi, Gopesh K.] Samarpan Kidney Ctr, Bhopal, India. [Sehgal, Meena] Energy & Resources Inst, New Delhi, India. [Kalra, Om P.] Pandit BD Sharma Univ Hlth Sci, Rohtak, Haryana, India. [Kher, Vijay] Medanta Hosp, Kidney & Urol Inst, Gurgaon, India. [Muliylil, Jayaprakash] Christian Med Coll & Hosp, Dept Community Hlth, Vellore, Tamil Nadu, India. [Thakur, Jarnail S.] Postgrad Inst Med Educ & Res, Sch Publ Hlth, Chandigarh, India. [Ramakrishnan, Lakshmy] All India Inst Med Sci, Dept Biochem, New Delhi, India. [Pandey, Chandra M.] Sanjay Gandhi Post Grad Inst Med Sci, Dept Biostat & Hlth Informat, Lucknow, Uttar Pradesh, India. [Sivakumar, Vishnubhotla] Sri Venkateswara Inst Med Sci, Dept Nephrol, Tirupati, Andhra Pradesh, India. [Dhaliwal, Rupinder S.; Khanna, Tripti; Jha, Vivekanand] Indian Council Med Res, Noncommunicable Dis Div, New Delhi, India. [Kumari, Aruna; Prasadini, Geetha; Reddy, Janardhan C.; Reddy, Jawahar] Govt Andhra Pradesh, Dept Hlth, Hyderabad, Andhra Pradesh, India. [Jha, Vivekanand] Imperial Coll, Sch Publ Hlth, London, England.</p> <p>Jha, V (corresponding author), George Inst Global Hlth, Jasola Dist Ctr, 310-11 Elegance Tower, New Delhi 110025, India. vjha@georgeinstitute.org.in</p> <p>Introduction: Despite reports of a high prevalence of chronic kidney disease (CKD) from the coastal Uddanam region of Andhra Pradesh, India, there are no accurate data on the distribution of kidney function abnormalities and CKD risk factors in this region. Methods: A total of 2419 participants were recruited through multistage cluster random sampling from 67 villages. Serum creatinine and urine protein creatinine ratio were measured using validated methodologies. All abnormal estimated glomerular filtration rate (eGFR) and urine protein creatinine ratio values were reconfirmed after 3 months. A range of sociodemographic factors were evaluated for their association with CKD using Poisson regression. Results: Of 2402 eligible subjects (mean 1 SD age, 45.67 +/- 13.29 years; 51% female), 506 (21.07%) had CKD (mean 1 SD age, 51.79 +/- 13.12 years; 41.3% female). A total of 246 (10.24%) had eGFR 60 ml/min/1.73 m(2), whereas 371 (15.45%) had an</p>	INT	JUL TO DEC	Community Health	WOS:000596812300017

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	elevated urine protein creatinine ratio (0.15 or 0.15, except a lower frequency of males in the former. Conclusion: We confirmed the high prevalence of CKD in the adult population of Uddanam. The cause was not apparent in a majority. Subjects with a low eGFR with or without elevated proteinuria were phenotypically distinct from those with proteinuria and preserved eGFR. Our data suggest the need to apply a population-based approach to screening and prevention and studies to understand the causes of CKD in this region.				
201.	Gupta, A., George, R., Aboobacker, F. N., Thamaraiselvi, B. and Priscilla, A. J. Pilomatricomas and café au lait macules as herald signs of constitutional mismatch repair deficiency (CMMRD) syndrome-A case report Pediatr Dermatol; 2020, 37 (6): 1139-1141 Address: Department of Dermatology, CMC Hospital, Vellore , India. Department of Haematology, CMC Hospital, Vellore , India. Department of Radiology, CMC Hospital, Vellore , India. Department of Pathology, CMC Hospital, Vellore , India. Constitutional mismatch repair deficiency (CMMRD) syndrome results from bi-allelic mutations in DNA mismatch repair genes-MLH1, MSH2, MSH6, or PMS2. We present two siblings with CMMRD having p.Arg802Ter (c.2404C >T) homozygous mutations in PMS2 exon 14 with typical cutaneous features. This case report highlights the role of the dermatologist in early diagnosis of this condition.	INT	JUL TO DEC	Dermatology, Haematology, Radiology, Pathology	PMID: 32876971
202.	Gupta, A., Turel, M. K., Moorthy, R. K., Joseph, V. and Rajshekhar, V. Treatment Outcomes and Follow-Up Compliance after Less than Total and Total Resection of Vestibular Schwannomas in 294 Patients Neurol India; 2020, 68 (6): 1351-1360 Address: Department of Neurological Sciences, Christian Medical College Hospital, Vellore , Tamil Nadu, India. BACKGROUND: To document the outcomes and quality of follow-up compliance after planned subtotal, near-total and gross-total resection (STR, NTR, and GTR) of vestibular schwannomas (VSs). METHODS: This is a retrospective study of 294 consecutive patients, who underwent excision of a previously untreated VS, between 2005 and 2015. Outcomes including long-term tumor control, facial nerve outcomes, and compliance with follow-up advice were studied. RESULTS: The mean diameter of the tumors was 4.2 cm (± 0.8 cm; range: 2.2-7.5 cm). Less than total excision was performed in 55 cases (18.7%), of which NTR was performed in 65% of the cases (n = 36) and STR in the remaining 35%. In the GTR group, 29.3% of patients had a good facial outcome (House and Brackmann [HB] grades 1-3) whereas 81.8% of patients undergoing NTR/STR had a good facial outcome. Follow-up was available in 94.5% of patients undergoing NTR/STR whereas only 69.5% of patients undergoing GTR could be followed up. Only 61.8% of the patients who had NTR/STR were compliant with our follow-up advice and were on either regular radiological surveillance or underwent stereotactic radiosurgery (SRS) as advised. In this group of patients, those with larger tumors and those who underwent a more extensive resection of their tumor were less likely to be	NAT	JUL TO DEC	Neurological Sciences	PMID: 33342868

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	compliant with follow-up advice (P = 0.043 and 0.007, respectively). Among patients who had GTR, nine patients (3.7%) were detected to have tumor recurrence at a mean interval of 5.5 years after surgery. CONCLUSION: "Incomplete" microsurgical excision followed by SRS is an effective strategy that fulfills the twin objectives of preservation of function and long-term tumor control. Considering follow-up attrition due to various causes, upfront SRS at the first follow-up visit-even for a small residue-may be a prudent strategy in selected patients.				
203.	Gupta, P., Johnson, J. T., Soumya, S. L., Cherian, K. E., Kapoor, N. and Paul, T. V. A case of H. pylori infection presenting as refractory hypothyroidism J Family Med Prim Care; 2020, 9 (7): 3770-3772 Address: Department of Endocrinology, Diabetes and Metabolism, Christian Medical College and Hospital, Vellore , Tamil Nadu, India. We present the case of a 45-year-old lady with long standing hypothyroidism who was euthyroid on replacement for many years, but stopped responding even to supraphysiological doses of LT4 since the last five years. She complained of abdominal discomfort, bloating, and nausea. She did not have diarrhea or weight loss. Levothyroxine absorption test was done which was suggestive of malabsorption and she was started on triple therapy for H. pylori eradication after confirmation of diagnosis. After 10 days of treatment initiation, she developed symptoms of thyrotoxicosis with her supraphysiological dose of LT4, which was then tapered to a lower dose. Euthyroid state was ultimately achieved with lower doses of LT4 replacement.	NAT	JUL TO DEC	Endocrinology, Diabetes and Metabolism	PMID: 33102369 PMC:7567260
204.	Gupta, P., Muthukumar, N., Rajshekhkar, V., Tripathi, M., Thomas, S., Gupta, S., Lal, V., Pal, P., Abraham, M., Behari, S., Paliwal, V., Singh, D., Pandey, S., Narasimhan, L., Srinivas, D., Panda, S., Kale, S. and Chandra, P. Neurosurgery and Neurology Practices during the Novel COVID-19 Pandemic: A Consensus Statement from India Neurology India; 2020, 68 (2): 246-254 Address: Division of Innovation and Translational Research, ICMR, New Delhi, India Department of Neurosurgery, Devdoss Hospital, Madurai, India Department of Neurological Sciences, CMC, Vellore , India Department of Neurology, AIIMS, New Delhi, India Department of Neurology, SCTIMST, Trivandrum, Kerala, India Department of Neurosurgery, PGIMER, Chandigarh, India Department of Neurology, PGIMER, Chandigarh, India Department of Neurology, NIMHANS, Bengaluru, Karnataka, India Department of Neurosurgery, SGPGI, Lucknow, Uttar Pradesh, India Department of Neurology, SGPGI, Lucknow, Uttar Pradesh, India Department of Neurosurgery, GB Pant, AIIMS, New Delhi, India Department of Neurology, GB Pant Hospital, New Delhi, India	INT	JAN TO JUN	Neurological Sciences	SCOPUS H-INDEX:82 IF: 4.149 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Department of Neurology, Institute of Neurology, Madras Medical College, Chennai, Tamil Nadu, India Department of Neurosurgery, NIMHANS, Bengaluru, Karnataka, India Department of Neurology, AIIMS, Jodhpur, Rajasthan, India Department of Neurosurgery, CN Center, AIIMS, New Delhi, 110 029, India</p> <p>Background: The COVID-19 infection outbreak has aroused increasing attention and affected thousands of people nationwide. The long incubation period, high infectious rate, varied manifestation, and absence of effective treatment make it difficult to manage the disease transmission. Objective: The intended goals are to encourage efficient management of neurological and neurosurgical patients, resource utilization, and protecting the healthcare provider during the COVID-19 epidemic. Herein, we present a consensus statement from various centers in India Methodology: In addition to the literature review, recommendations were included from neurologists and neurosurgeons from various centers in India. Results: Every patient presenting for treatment should be treated as a potential asymptomatic infected case. Patients should be categorized based upon the priority as acute (require immediate treatment/surgery within 24 h), sub-acute (requiring treatment within a maximum of 7-10 days), or chronic (requiring treatment within a month). Non-essential elective surgeries and outpatient clinics should be avoided after informing the patient(s). There is a high risk of aerosol dispersion during intubation and certain neurosurgical procedures particularly those involving drills and endoscopes. These procedures should be performed wearing full personal protective equipment. The workflow of the operating rooms should also be modified significantly. Minor modifications in personal and professional lifestyles and routine training to use the PPE will ensure efficient management of resources. Conclusion: These recommendations could be used to mitigate the risks and reduce exposure to other patients, public, and healthcare staff. © 2020 Neurology India, Neurological Society of India IF: Published by Wolters Kluwer - Medknow.</p>				
205.	<p>Gupta, P., Paul, J., Nandipati, V. S., Cherian, K. E., Kapoor, N. and Paul, T. V. VISUAL VIGNETTE Endocr Pract; 2020, Address: From: Department of Endocrinology, Christian Medical College, Vellore, India.</p>	INT	JAN TO JUN	Endocrinology	<p>PMID:32045290 H-INDEX:45 IF: 2.708 BIOXBIO (2018/2019)</p>
206.	<p>Gupta, P., Paul, J., Nandipati, V. S., Cherian, K. E., Kapoor, N. and Paul, T. V. What is the diagnosis? Answer Endocrine Practice; 2020, 26 (8): 932-932 Address: [Gupta, Pragma; Paul, Jinson; Nandipati, Venkata Sandeep; Cherian, Kripa Elizabeth; Kapoor, Nitin; Paul, Thomas V.] Christian Med Coll & Hosp, Dept Endocrinol, Vellore 632004, Tamil Nadu, India. Paul, TV (corresponding author), Christian Med Coll & Hosp, Dept Endocrinol, Vellore 632004, Tamil Nadu, India. thomasvpaul@yahoo.com</p>	INT	JUL TO DEC	Endocrinology	<p>WOS:000572836600017</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
207.	<p>Gupta, R. K., Vajpayee, S., Agrawal, R., Goyal, A. K., Nair, N. P. and Thiyagarajan, V. Post Vaccination Epidemiology and Genotyping of Rotavirus Gastroenteritis at a Tertiary Care Centre of North-East Rajasthan Indian J Pediatr; 2020, Address: Department of Pediatric Medicine, SMS Medical College, Jaipur, Rajasthan, India. Department of Pathology, SMS Medical College, Jaipur, Rajasthan, India. Department of Pediatric Medicine, SMS Medical College, Jaipur, Rajasthan, India. goyalalok916@gmail.com. Wellcome Trust Research Laboratory, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>OBJECTIVES: To estimate the proportion of rotavirus diarrhea among hospitalized children aged under-five years, to determine the circulating rotavirus genotypes and to know impact rotavirus vaccine on prevalence and severity of rotavirus diarrhea. METHODS: This study was a hospital based cross-sectional observational study conducted over a period of 29 mo (September 2017 through January 2020). Stool samples were collected from children who fall within the age range of 0-59 mo with acute diarrhea attending emergency or needing admission. Stool samples were tested for rotavirus by the enzyme linked immune-sorbent assay (ELISA) and genotyped using published methods. RESULTS: Out of 1480 samples, 360 (24.32%) cases were positive for rotavirus by ELISA, majority of them were male (62.97%). Maximum rotavirus positivity was found in the age group of <11 mo (55.27%). Statistically significance difference was seen in episodes of diarrhea and experience of vomiting in rotavirus diarrhea cases. Highest prevalence has been seen during winter season. The most prevalent G and P type combinations were G3P [8] strains [122 (34.08%)], G2P [4] [83 (23.18%)], G1P [8] [27 (7.54%)] and G9P [4] [20 (5.59%)]. Mixed strains contribute a significant proportion of stool sample. CONCLUSIONS: Rotavirus is an important cause of diarrhea in hospitalized children. There is continued circulation of G9 and G12 strains and the emergence of G3P [8] as most common strain.</p>	NAT	JUL TO DEC	Wellcome Trust Research Laboratory	PMID:33247377 WOS:000593380300001
208.	<p>Gupta, R., Arul, A. O., Sasikumar, J. R., Prabhu, A. J. and James, P. Imprint Cytology of Thoracoscopic Pleural Biopsy Tissue for Early Etiological Diagnosis of Pleural Effusion: A Pilot Study From India J Bronchology Interv Pulmonol; 2020, Address: Departments of Respiratory Medicine. Pulmonary Medicine. Pathology, Christian Medical College, Vellore, TN, India.</p> <p>Thoracoscopic pleural biopsy provides the highest diagnostic yield in both malignant and tubercular pleural effusions. However histopathologic report takes 3 to 5 days to provide the diagnosis, resulting in a delay of further management plans like pleurodesis or chest tube removal. Imprint cytology of biopsy tissue can provide early information about the etiological diagnosis. Thus, we conducted this pilot study in 66 patients of exudative pleural effusions undergoing medical thoracoscopy. One or 2 biopsy pieces obtained during medical thoracoscopy from</p>	INT	JUL TO DEC	Respiratory Medicine, Pulmonary Medicine, Pathology	PMID: 33122599

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	pleural nodules were used to prepare imprint cytology slides in the thoracoscopy suite. In comparison to thoracoscopic pleural biopsy, the diagnostic yield of imprint cytology of pleural tissue was 92% (49 of 53 cases) in cases of malignant pleural effusion and 75% (9 of 12 cases) in cases of tuberculosis pleural effusions. Imprint cytology provided a definite idea about the type of diagnosis, about 2.5 days before the histopathology results. By providing early etiological diagnosis, it may also decrease the duration of hospital stay and health care expenditure. A large prospective trial has been planned in our center to confirm this hypothesis.				
209.	<p>Gupta, V., Rebekah, G., Sudhakar, Y., Santhanam, S., Kumar, M. and Thomas, N. A randomized controlled trial comparing the effect of fortification of human milk with an infant formula powder versus unfortified human milk on the growth of preterm very low birth weight infants Journal of Maternal-Fetal and Neonatal Medicine; 2020, 33 (15): 2507-2515</p> <p>Address: Department of Neonatology, Christian Medical College and Hospital, Vellore, India Department of Biostatistics, Christian Medical College and Hospital, Vellore, India Department of Clinical Biochemistry, Christian Medical College and Hospital, Vellore, India</p> <p>Objective: To optimize growth in very low birth weight (VLBW) infants, human milk fortification is standard of care in neonatal units of high-income countries. However, commercial fortifiers may not be available or it may be too expensive in resource-limited settings. As an alternative to using human milk fortifiers, we studied the effects of milk fortification with an infant formula on growth and biochemical parameters of very low birth weight (VLBW) infants Methods: We undertook a prospective, randomized controlled trial in the neonatal unit of a tertiary care hospital in South India. Preterm infants weighing <1500 grams and <34 weeks of gestation were randomized after stratification according to birth weight into two groups (<1250 g and 1250 to <1500 g). One group received fortified human milk while the other received exclusive human milk. The fortification was done with a commercially available infant milk powder added to expressed breast milk (when the infant reached 150 ml/kg/day of feeds) and continued till the infant reached 1800 g. The primary outcome was the rate of weight gain/kg/day. Secondary outcome measures were linear growth, head circumference increase, biochemical parameters to assess the adequacy or excess of protein supplementation and comorbidities like feed intolerance, sepsis, and necrotizing enterocolitis (NEC). Results: Total of 163 babies were randomized during the study period, of whom 148 babies (73 in the standard arm and 75 in the fortification arm) completed the trial. Baseline demographic data among the two groups were comparable. Weight gain/kg/day (mean difference (MD) 1.98 g/kg/day; 95% CI: 1.03-2.92; p<.001) and linear growth (MD 0.09 cm/week; 95%</p>	INT	JAN TO JUN	Neonatology, Biostatistics, Clinical Biochemistry	<p>PMID: 30486700 SCOPUS H-INDEX:75 IF: 1.569 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	CI: 0.02–0.2; p=.02) was significantly higher in the fortification arm as compared to the control arm. The head growth (head circumference gain in cm/week) was higher and length of hospital stay lesser in the fortification arm, though not statistically significant. Biochemical parameters, rates of sepsis, feed intolerance, and necrotizing enterocolitis (NEC) were not different between the two groups. Conclusion: Fortification with Infant milk powder achieves better growth parameters than unfortified human milk and can be a useful alternative for feeding preterm VLBW infants in low resource settings. © 2019, © 2019 Informa UK Limited, trading as Taylor & Francis Group.				
210.	<p>Gurushekar, P. R., Isiah, R., John, S., Sebastian, T. and Varghese, L. Effects of radiotherapy on olfaction and nasal function in head and neck cancer patients Am J Otolaryngol; 2020, 41 (4): 102537</p> <p>Address: Department of Otorhinolaryngology, Christian Medical College, Vellore, India. Department of Radiotherapy, Christian Medical College, Vellore, India. Department of Biostatistics, Christian Medical College, Vellore, India. Department of Otorhinolaryngology, Christian Medical College, Vellore, India. Electronic Address: laleevarghese@cmcvellore.ac.in.</p> <p>PURPOSE: Radiotherapy (RT) is a major component of treatment in head and neck malignancies and often the radiation field includes the nasal cavity and olfactory cleft region. We aimed to assess olfaction, mucociliary clearance time and quality of life (QOL) before RT and during the course of radiotherapy. METHODS: This prospective, observational, cohort study was conducted over a period of 1 year. The olfactory function, mucociliary clearance and QOL of patients with primary head and neck cancers undergoing radiation therapy as part of treatment were assessed prior to radiotherapy and followed up serially up to 3 months after radiotherapy. A total of 21 patients were enrolled. Assessment was done using noninvasive tests for better compliance and ease of examination. RESULTS: Among the 21 patients recruited, 18 completed radiotherapy and 13 were assessed 3 months post radiotherapy. Mean olfactory scores (including olfactory threshold and odor identification), using Connecticut Chemosensory Clinical Research Center (CCCRC) test, deteriorated significantly at the end of radiotherapy ($p < 0.001$) as compared to scores before irradiation. Subjective assessment of olfaction by Appetite, Hunger and Sensory perception (AHSP) questionnaire did not demonstrate significant impairment in nasal function ($p < 0.319$) although overall QOL significantly deteriorated ($p 0.004$). The mucociliary clearance time was prolonged in 72% of the patients at the end of radiotherapy. CONCLUSION: Deterioration in olfactory function was found to occur during the course of radiotherapy with gradual improvement after 3 months. However, patients did not notice olfactory dysfunction subjectively. Mucociliary dysfunction persisted even</p>	INT	JAN TO JUN	Otorhinolaryngology, Radiotherapy, Biostatistics	<p>PMID:32416968 SCOPUS H-INDEX:55 IF: 0.932 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
211.	<p>after 3 months following radiation.</p> <p>Hamisu, A. W., Blake, I. M., Sume, G., Braka, F., Jimoh, A., Dahiru, H., Bonos, M., Dankoli, R., Mamuda Bello, A., Yusuf, K. M., Lawal, N. M., Ahmed, F., Aliyu, Z., John, D., Nwachukwu, T. E., Ayeni, M. F., Gumede-Moelets, N., Veltsos, P., Giri, S., Praharaj, I., Metilda, A., Bandyopadhyay, A., Diop, O. M. and Grassly, N. C.</p> <p>Characterizing Environmental Surveillance Sites in Nigeria and Their Sensitivity to Detect Poliovirus and Other Enteroviruses J Infect Dis; 2020, Address: World Health Organization Nigeria, Abuja, Federal Capital Territory (FCT), Nigeria. Department of Infectious Disease Epidemiology, Imperial College London, London, United Kingdom. National Primary Health Care Development Agency, Garki, Abuja, FCT, Nigeria. Public Health Development, Garki, Abuja, FCT, Nigeria. WUPA Wastewater Treatment Plant, Abuja, FCT, Nigeria. World Health Organization Regional Office for Africa, Cité du Djoué, Brazzaville, Republic of Congo. Novel-t Sàrl, SATIGNY, Geneva, Switzerland. Division of Gastrointestinal Sciences, Christian Medical College, Vellore, India. Bill & Melinda Gates Foundation, Seattle, Washington, USA. World Health Organization Headquarters, Geneva, Switzerland.</p> <p>BACKGROUND: Environmental surveillance (ES) for poliovirus is increasingly important for polio eradication, often detecting circulating virus before paralytic cases are reported. The sensitivity of ES depends on appropriate selection of sampling sites, which is difficult in low-income countries with informal sewage networks. METHODS: We measured ES site and sample characteristics in Nigeria during June 2018-May 2019, including sewage physicochemical properties, using a water-quality probe, flow volume, catchment population, and local facilities such as hospitals, schools, and transit hubs. We used mixed-effects logistic regression and machine learning (random forests) to investigate their association with enterovirus isolation (poliovirus and nonpolio enteroviruses) as an indicator of surveillance sensitivity. RESULTS: Four quarterly visits were made to 78 ES sites in 21 states of Nigeria, and ES site characteristic data were matched to 1345 samples with an average enterovirus prevalence among sites of 68% (range, 9%-100%). A larger estimated catchment population, high total dissolved solids, and higher pH were associated with enterovirus detection. A random forests model predicted "good" sites (enterovirus prevalence >70%) from measured site characteristics with out-of-sample sensitivity and specificity of 75%. CONCLUSIONS: Simple measurement of sewage properties and catchment population estimation could improve ES site selection and increase surveillance sensitivity.</p>	INT	JAN TO JUN	Gastrointestinal Sciences	<p>PMID:32415775 H-INDEX:241 IF: 5.045 BIOXBIO (2018/2019)</p>
212.	<p>Hanafi, N. S., Agarwal, D., Chippagiri, S., Brakema, E. A., Pinnock, H., Khoo, E. M., Sheikh, A., Liew, S. M., Ng, C. W., Isaac, R., Chinna, K., Wong, L. P., Hussein, N., Abu</p>	INT	JUL TO DEC	RUHSA	WOS:000606501404398

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Bakar, A. I., Pang, Y. K. and Juvekar, S. Chronic respiratory diseases (CRDs) in low- and middle-income countries (LMICs): A scoping review of survey methodologies European Respiratory Journal; 2020, 56 Address: [Hanafi, Nik Sherina; Khoo, Ee-Ming; Liew, Su-May; Hussein, Norita; Abu Bakar, Ahmad Ihsan] Univ Malaya, Fac Med, Dept Primary Care Med, Kuala Lumpur, Malaysia. [Agarwal, Dhiraj; Juvekar, Sanjay] KEM Hosp Res Ctr, Pune, Maharashtra, India. [Chippagiri, Soumya; Isaac, Rita] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Brakema, Evelyn A.] Leiden Univ Med Ctr, Leiden, Netherlands. [Pinnock, Hilary; Sheikh, Aziz] Univ Edinburgh, Edinburgh, Midlothian, Scotland. [Ng, Chiu-Wan; Wong, Li-Ping] Univ Malaya, Fac Med, Dept Social & Prevent Med, Kuala Lumpur, Malaysia. [Chinna, Karuthan] Taylors Univ Malaysia, Fac Hlth & Med Sci, Sch Med, Selangor, Malaysia. [Pang, Yong-Kek] Univ Malaya, Fac Med, Dept Med, Kuala Lumpur, Malaysia. sherina@ummc.edu.my</p>				
213.	<p>Hanas, J. S., Hocker, J. R. S., Evangeline, B., Prabhakaran, V., Oommen, A., Rajshekhar, V., Drevets, D. A. and Carabin, H. Distinguishing patients with idiopathic epilepsy from solitary cysticercus granuloma epilepsy and biochemical phenotype assessment using a serum biomolecule profiling platform Plos One; 2020, 15 (8): e0237064 Address: Department of Biochemistry, University of Oklahoma Health Sciences Center, Oklahoma City, OK, United States of America. Department of Neurological Sciences, Christian Medical College, Vellore, India. Department of Internal Medicine, University of Oklahoma Health Sciences Center, and the Veterans Administration Medical Center, Oklahoma City, OK, United States of America. Department of Biostatistics and Epidemiology, University of Oklahoma Health Sciences Center, Oklahoma City, OK, United States of America. Department of Pathology and Microbiology, Faculty of Veterinary Medicine, Université de Montréal, Saint-Hyacinthe, Canada. A major source of epilepsy is Neurocysticercosis (NCC), caused by Taenia solium infection. Solitary cysticercus granuloma (SCG), a sub-group of NCC induced epilepsy, is the most common form of NCC in India. Current diagnostic criteria for SCG epilepsy require brain imaging which may not be available in communities where the disease is endemic. Identification of serum changes and potential biomolecules that could distinguish SCG epilepsy from idiopathic generalized epilepsy (IE), without the initial need for imaging, could assist in disease identification, understanding, and treatment. The objective here was to investigate, using mass spectrometry (MS), sera biomolecule differences between patients with SCG epilepsy or IE to help distinguish these disorders based on physiological differences, to understand underlying phenotypes and mechanisms, and to lay ground work for future therapeutic and biomarker analyses. Sera were obtained from patients with SCG or IE (N = 29 each group). Serum mass peak profiling was</p>	INT	JUL TO DEC	Neurological Sciences	PMID: 32823271 PMC:7527271

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	performed with electrospray ionization (ESI) MS, and mass peak area means in the two groups were compared using leave one [serum sample] out cross validation (LOOCV). Serum LOOCV analysis identified significant differences between SCG and IE patient groups ($p = 10^{-20}$), which became non-significant ($p = 0.074$) when the samples were randomly allocated to the groups and reanalyzed. Tandem MS/MS peptide analysis of serum mass peaks from SCG or IE patients was performed to help identify potential peptide/protein biochemical and phenotypic changes involving these two forms of epilepsy. Bioinformatic analysis of these peptide/protein changes suggested neurological, inflammatory, seizure, blood brain barrier, cognition, ion channel, cell death, and behavior related biochemical systems were being altered in these disease states. This study provides groundwork for aiding in distinguishing SCG and IE patients in minimally invasive, lower-cost manners, for improving understanding of underlying epilepsy mechanisms, and for further identifying discriminatory biomarkers and potential therapeutic targets.				
214.	<p>Hanas, J. S., Hocker, J. R. S., Vannarath, C., Evangeline, B., Prabhakaran, V., Oommen, A., Couch, J., Anderson, M., Rajshekhkar, V., Carabin, H. and Drevets, D.</p> <p>Distinguishing and Biochemical Phenotype Analysis of Epilepsy Patients Using a Novel Serum Profiling Platform</p> <p>Brain Sci; 2020, 10 (8): Address: Department of Biochemistry, University of Oklahoma Health Sciences Center, Oklahoma City, OK 73104, USA.</p> <p>Department of Neurological Sciences, Christian Medical College, Vellore 632004, India.</p> <p>Department of Neurology, University of Oklahoma Health Sciences Center, Oklahoma City, OK 73104, USA.</p> <p>Department of Biostatistics and Epidemiology, University of Oklahoma Health Sciences Center, Oklahoma City, OK 73104, USA.</p> <p>Department of Pathology and Microbiology, Faculty of Veterinary Medicine, Université de Montréal, Saint-Hyacinthe, QC H3T 1J4, Canada.</p> <p>Department of Internal Medicine, University of Oklahoma Health Sciences Center, Oklahoma City, OK 73104, USA.</p> <p>Diagnosis of non-symptomatic epilepsy includes a history of two or more seizures and brain imaging to rule out structural changes like trauma, tumor, infection. Such analysis can be problematic. It is important to develop capabilities to help identify non-symptomatic epilepsy in order to better monitor and understand the condition. This understanding could lead to improved diagnostics and therapeutics. Serum mass peak profiling was performed using electrospray ionization mass spectrometry (ESI-MS). A comparison of sera mass peaks between epilepsy and control groups was performed via leave one [serum sample] out cross-validation (LOOCV). MS/MS peptide analysis was performed on serum mass peaks to compare epilepsy patient and control groups. LOOCV identified significant differences between the epilepsy patient group and control group ($p = 10^{-22}$). This value became non-significant ($p = 0.10$) when the samples were randomly</p>	INT	JUL TO DEC	Neurological Sciences	<p>PMID: 32751954</p> <p>PMC:7464346</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	allocated between the groups and reanalyzed by LOOCV. LOOCV was thus able to distinguish a non-symptomatic epilepsy patient group from a control group based on physiological differences and underlying phenotype. MS/MS was able to identify potential peptide/protein changes involved in this epilepsy versus control comparison, with 70% of the top 100 proteins indicating overall neurologic function. Specifically, peptide/protein sera changes suggested neuro-inflammatory, seizure, ion-channel, synapse, and autoimmune pathways changing between epilepsy patients and controls.				
215.	<p>Hazra, D., Kota, A. A. and Agarwal, S. Post-traumatic preauricular pulsatile swelling in a patient on oral anticoagulation therapy BMJ case reports; 2020, 13 (7): Address: Department of Vascular Surgery, Christian Medical College Vellore, Vellore, India. Department of Vascular Surgery, Christian Medical College Vellore, Vellore, India albertkota@cmcvellore.ac.in.</p> <p>The differential diagnoses for preauricular swellings include dermoid cyst, lymph nodes, lipoma, nerve sheath tumours, parotid swelling, mastoiditis, vascular malformations and arterio-venous fistulas aneurysms/pseudoaneurysms. Superficial temporal artery pseudoaneurysm(s) (STAPA) are rare (1% of all aneurysms) vascular complications, which occur following a blunt injury of the head or iatrogenic causes. The use of anticoagulation therapy increases the risk of pseudoaneurysm formation. We present a case of traumatic STAPA while on oral anticoagulation. He was treated with surgical exploration, STAPA excision with ligation of the vessel. He had an uneventful recovery with a good functional and cosmetic outcome at 1 year.</p>	INT	JUL TO DEC	Vascular Surgery	PMID: 32646934 PMC:7351282
216.	<p>Hazra, Darpanarayan, Nekkanti, Ankita and Prabhakar Abhilash, Kundavaram Injury pattern and outcome of assault victims: An emergency department perspective Archives of Trauma Research; 2020, 9 (4): 154-159 ADDRESS: Department of Emergency Medicine, Christian Medical College, Vellore, Tamil Nadu, India</p> <p>Background: Violence-related injuries top the list as a cause of mortality in the 15&#8211;40 years&#39; age group in India. In contrast to the West, the spectrum of assault injuries in Southeast Asian countries is different. Our main aim was to profile intentional injuries due to interpersonal violence treated in the emergency department (ED) and to describe the severity, pattern, etiology, and outcome in such patients. Materials and Methods: We conducted a case-series analysis of assault victims who presented to the ED of Christian Medical College and Hospital, Vellore, India, from January 2017 to December 2018. Data were retrieved electronically from the clinical workstation. Categorized variables were summarized using counts and percentages. Quantitative variables were summarized using mean and standard deviation (SD). Results: During the</p>	INT	JUL TO DEC	Emergency Medicine	PMC 8657

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>study period, a total of 381 patients with a mean age of 36.16 (SD: 13.9) years presented to the ED. Male (81.9%) predominance was noted among these victims. A majority of them, i.e., 257 (67%) victims, were assaulted by people that were known to them, of which 66 (17.3%) victims were reported as domestic violence. Blunt objects were used in most, i.e., 234 (61.4%) cases. A spike in the incidence of assault, in general, was noted in the month of September during the South Indian festival season. Approximately one-fourth (21.3%) of the victims required hospital admission. Overall, 15.74% of the victims had to undergo major surgical procedures. There were no mortalities recorded among these study participants. Conclusions: Violence and its consequences lead to severe injuries and levy a heavy burden on health care. There is an urgent need to address the social and emotional needs of adolescents and young adults who are most at risk of being the victims of assault.</p>				
217.	<p>Healy, B. J., Budanec, M., Ourdane, B., Peace, T., Petrovic, B., Sanz, D. E., Scanderbeg, D. J. and Tuntipumiamorn, L. An IAEA survey of radiotherapy practice including quality assurance extent and depth Acta Oncologica; 2020, 59 (5): 503-510</p> <p>Address: [Healy, B. J.; Ourdane, B.] IAEA, Dosimetry & Med Radiat Phys Sect, Wagramerstr 5, A-1400 Vienna, Austria. [Budanec, M.] UHC Sestre Milosrdnice, Dept Med Phys, Zagreb, Croatia. [Peace, T.] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Petrovic, B.] Inst Oncol Vojvodina, Dept Radiotherapy, Sremska Kamenica, Serbia. [Sanz, D. E.] Ctr Atom Bariloche, Dept Fis Med, San Carlos De Bariloche, Rio Negro, Argentina. [Scanderbeg, D. J.] Univ Calif San Diego, Dept Radiat Med & Appl Sci, San Diego, CA 92103 USA. [Tuntipumiamorn, L.] Mahidol Univ, Siriraj Hosp, Fac Med, Div Radiat Oncol, Bangkok, Thailand. Healy, BJ (reprint author), IAEA, Dosimetry & Med Radiat Phys Sect, Wagramerstr 5, A-1400 Vienna, Austria. dosimetry@iaea.org</p> <p>Background: The IAEA recommends a quality assurance program in radiotherapy to ensure safe and effective treatments. In this study, radiotherapy departments were surveyed on their current practice including the extent and depth of quality assurance activities. Methods: Radiotherapy departments were voluntarily surveyed in three stages, firstly, in basic facility information, secondly, in quality assurance activities and treatment techniques, and thirdly, in a snapshot of quality assurance, departmental and treatment activities. Results: The IAEA received completed surveys from 381 radiotherapy departments throughout the world with 100 radiotherapy departments completing all three surveys. Dominant patterns were found in linac-based radiotherapy with access to treatment planning systems for 3D-CRT and 3D imaging. Staffing levels for major staff groups were on average in the range recommended by the IAEA. The modal patient workload per EBRT unit was as expected in the range of 21-30 patients per day, however significant</p>	INT	JAN TO JUN	Radiotherapy	<p>WOS:000509079400001 SCOPUS H-INDEX:93 IF: 3.298 BIOXBIO (2018/2019)</p>

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	instances of high workload (more than 50 patients per day per treatment unit) were reported. Staffing levels were found to correlate with amount of treatment equipment and patient workload. In a self-assessment of quality assurance performance, most radiotherapy departments reported that they would perform at least 60% of the quality assurance activities itemized in the second survey, with particular strength in equipment quality control. In a snapshot survey of quality assurance performance, again equipment quality control practice was well developed, particularly for the treatment equipment. Conclusions: The IAEA surveys provide a snapshot of current radiotherapy practice including quality assurance activities.				
218.	Himadri, M. D., George, R., Mathew, L., Vanitha, S., Mani, T. and Jeyaseelan, L. The role of thymus and activation-regulated chemokine as a marker of severity of atopic dermatitis J Am Acad Dermatol; 2020, Address: Department of Dermatology, Venereology and Leprosy, Christian Medical College, Vellore , Tamil Nadu, India. Department of Dermatology, Venereology and Leprosy, Christian Medical College, Vellore , Tamil Nadu, India. Electronic Address: reneweorge@gmail.com . Department of Biochemistry, Christian Medical College, Vellore , Tamil Nadu, India. Department of Biostatistics, Christian Medical College, Vellore , Tamil Nadu, India.	INT	JAN TO JUN	Dermatology, Biochemistry, Biostatistics	PMID:32439469 H-INDEX:202 IF: 7.102 BIOXBIO (2018/2019)
219.	Hokland, P., Shah, M., David, K., Evens, A., Auer, R., Ledieu, R., Kreissl, S., Brockelmann, P. J., Borchmann, P., Korula, A., Mathews, V., Owattanapanich, W. and Trotman, J. How I treat advanced Hodgkin lymphoma - a global view Br J Haematol. 2020 Sep;190(6):837-850. doi: 10.1111/bjh.16587. Epub 2020 Jun 19. Address: [Hokland, Peter] Aarhus Univ, Fac Hlth, Dept Clin Med, Aarhus, Denmark. [Shah, Mansi; David, Kevin; Evens, Andrew] Rutgers Canc Inst New Jersey, Div Blood Disorders, New Brunswick, NJ USA. [Auer, Rebecca] Barts Hlth NHS Trust, Dept Haematoooncol, London, England. [Ledieu, Rifca] Barts Canc Inst, Ctr Haematoooncol, London, England. [Kreissl, Stefanie; Broeckelmann, Paul]; Borchmann, Peter] Univ Cologne, Ctr Integrated Oncol, Dept Internal Med 1, Cologne, Germany. [Korula, Anu; Mathews, Vikram] Christian Med Coll & Hosp, Dept Haematol, Vellore , Tamil Nadu, India. [Owattanapanich, Weerapat] Mahidol Univ, Siriraj Hosp, Dept Med, Div Hematol, Fac Med, Bangkok, Thailand. [Trotman, Judith] Univ Sydney, Concord Repatriat Gen Hosp, Haematol Dept, Sydney, NSW, Australia. Hokland, P (reprint author), Aarhus Univ, Fac Hlth, Dept Clin Med, Aarhus, Denmark.; Trotman, J (reprint author), Univ Sydney, Concord Repatriat Gen Hosp, Haematol Dept, Sydney, NSW, Australia. phokland@clin.au.dk ; Judith.Trotman@health.nsw.gov.au	INT	JAN TO JUN	Clinical Hematology	WOS:000541057800001 SCOPUS H-INDEX:179 IF: 5.206 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
220.	<p>Ignas, D. M., Doria, A. S., Von Drygalski, A., Blanchette, V. S., Chang, E. Y., Dover, S., Fischer, K., Gibikote, S., Keshava, S. N., Querol, F., Abad, A., Babyn, P. and Ipsg Use of ultrasound for assessment of musculoskeletal disease in persons with haemophilia: Results of an International Prophylaxis Study Group global survey Haemophilia; 10</p> <p>Address: [Ignas, Danial M.; Blanchette, Victor S.; Dover, Saunya; Abad, Audrey] Hosp Sick Children, Res Inst, Child Hlth Evaluat Sci Program, Toronto, ON, Canada. [Doria, Andrea S.] Univ Toronto, Hosp Sick Children, Dept Med Imaging, Toronto, ON, Canada. [von Drygalski, Annette] Univ Calif San Diego, Dept Med, Hemophilia & Thrombosis Treatment Ctr, Div Hematol Oncol, San Diego, CA 92103 USA. [Blanchette, Victor S.] Univ Toronto, Hosp Sick Children, Div Hematol Oncol, Dept Pediat, Toronto, ON, Canada. [Chang, Eric Y.] Univ Calif San Diego, Radiol Serv, VA San Diego Healthcare Syst, San Diego, CA 92103 USA. [Fischer, Kathelijn] Univ Med Ctr, Van Creveldkliniek, Utrecht, Netherlands. [Gibikote, Sridhar; Keshava, Shyamkumar N.] Christian Med Coll & Hosp, Dept Radiol, Vellore, Tamil Nadu, India. [Querol, Felipe] Univ Valencia, Hosp LAFE, Haemostasis & Thrombosis Unit, Valencia, Spain. [Babyn, Paul] Univ Saskatchewan, Dept Med Imaging, Saskatoon, SK, Canada. [Babyn, Paul] Saskatoon City Hosp, Saskatchewan Hlth Author, Saskatoon, SK, Canada.</p> <p>Babyn, P (reprint author), Univ Saskatchewan, Dept Med Imaging, Saskatoon, SK, Canada.; Babyn, P (reprint author), Saskatoon City Hosp, Saskatchewan Hlth Author, Saskatoon, SK, Canada. paul.babyn@saskhealthauthority.ca</p> <p>Aim The objective of this survey was to understand the global trends of imaging assessments in persons with haemophilia, focusing on point-of-care ultrasound (POCUS). Insights into the barriers impeding its widespread proliferation as a frontline imaging modality were obtained. Methods The survey opened in September of 2017 and closed in May of 2018. Haemophilia Treatment Centres (HTCs) treating both paediatric/adult patients were the population of interest. A REDCap survey of 25 questions was disseminated to 232 clinical staff in 26 countries. Results The majority of respondents (88.3%, 91/103) reported that POCUS is most useful to confirm or rule out a presumed acute joint bleed. European HTCs reported the highest routine use of POCUS at 59.5% (22/37) followed by HTCs in the "Other" countries of the world at 46.7% (7/15) and North American HTCs at 43.9% (25/57). At the time of the survey, physiotherapists were identified as the clinical staff who perform POCUS 52.8% (28/53) of the time, in contrast with nurses/nurse practitioners who represent only 5.7% (3/53) of users. The greatest perceived barriers to the implementation of POCUS are the lack of trained healthcare professionals who can perform POCUS at 69.2% (74/107) and the overall time commitment required at 68.2% (73/107). Conclusion Despite POCUS being used in 49.5% (54/109) of sampled HTCs, it is still utilized almost 30% less globally than full diagnostic ultrasound. A list of barriers has been identified to</p>	INT	JAN TO JUN	Radiodiagnosis	<p>WOS:000534785100001 SCOPUS H-INDEX:88 IF: 3.590 BIOXBIO (2018/2019)</p>

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	inform HTCs which challenges they will likely need to overcome should they choose to incorporate this imaging modality into their practice.				
221.	<p>Inbaraj, L. R., Sindhu, K. N., Ralte, L., Ahmed, B., Chandramouli, C., Kharsyntiew, E. R., Jane, E., Paripooranam, J. V., Muduli, N., Akhilesh, P. D., Joseph, P., Nappoly, R., Reddy, T. A. and Minz, S.</p> <p>Perception and awareness of unintentional childhood injuries among primary caregivers of children in Vellore, South India: a community-based cross-sectional study using photo-elicitation method Inj Epidemiol; 2020, 7 (1): 62</p> <p>Address: Division of Community Health, Bangalore Baptist Hospital, Bangalore, Karnataka, 560024, India. leeberk2003@gmail.com. Department of Community Health, Christian Medical College, Vellore, Tamil Nadu, India. leeberk2003@gmail.com. Department of Community Health, Christian Medical College, Vellore, Tamil Nadu, India. The Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences, Christian Medical College, Vellore, Tamil Nadu, India. Rural Unit for Health and Social Affairs, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>OBJECTIVE: We studied the primary caregivers' perception, and further, their awareness of unintentional childhood injuries in south India. METHODS: A cross-sectional study was conducted in the rural block of Kaniyambadi, Vellore, among 300 primary caregivers of children aged between 0 and 14 years. A semi-structured interview was conducted with the primary caregivers using a photo-elicitation method, with a visual depiction of ten injury risky scenarios for a child. Scoring was done to assess the perception of environmental hazards in these scenarios, and further, knowledge on the prevention of these injuries. An independent 't' test was done to elicit differences in mean scores and a multivariate regression analysis was applied to ascertain factors independently associated with the scores. RESULTS: Primary caregivers had adequate perception regarding risks posed to children in scenarios such as climbing trees (96.2%), playing near construction sites (96%), firecrackers (96.4%) and crossing unmanned roads with no traffic signals (94%). Knowledge of prevention was poor however, in the following scenarios: a woman riding a bicycle without safety features, with child pillion sitting behind bare foot and legs hanging by one side (72.6%); a child playing near a construction site (85.9%); and a child playing with plastic bags (88.3%). Overall, educational status of the primary caregiver and socioeconomic status were associated with poorer perception of risks and knowledge about unintentional childhood injuries and their prevention. CONCLUSIONS: Pragmatic community-based childhood interventions incorporated into existing programs, with a special focus on road traffic injuries, burns and suffocation need to be implemented in high-risk settings of rural populations in South India.</p>	INT	JUL TO DEC	Community Health, The Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences, Rural Unit for Health and Social Affairs	PMID: 33308305 PMC:7734777
222.	Inja, R. R., Paul, R. R., Varghese, L., Sebastian, T. and Mathews, S. S.	INT	JUL TO DEC	ENT, Biostatistics	PMID: 32829057

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Impact of tonsillectomy on dysphagia symptoms and body weight in children Am J Otolaryngol; 2020, 41 (6): 102682 Address: Department of ENT, Christian Medical College, Vellore 632004, India. Department of Biostatistics, Christian Medical College, Vellore 632004, India. Department of ENT, Christian Medical College, Vellore 632004, India. Electronic Address: sumasusanm@yahoo.co.in .				
223.	Innamuri, R., Madhuri, S., George, D. E. and Ramaswamy, D. Telepsychiatry Through Email Mode: Current Status and Consensus Guidelines Indian J Psychol Med; 2020, 42 (5): 464-468 Address: Dept. of Psychiatry, Christian Medical College, Vellore , Tamil Nadu, India. authorship, and/or publication of this article.	NAT	JUL TO DEC	Psychiatry	PMID: 33414594 PMC:7750858
224.	Irodi, A., Chacko, B. R., Prajapati, A., Prabhu, A. J., Vimala, L. R., Christopher, D. J. and Gnanamuthu, B. R. Inflammatory myofibroblastic tumours of the thorax: Radiologic and clinicopathological correlation Indian J Radiol Imaging; 2020, 30 (3): 266-272 Address: Department of Radiology, Christian Medical College, Vellore , Tamil Nadu, India. Department of Medical Imaging, Sunnybrook Health Sciences Centre, University of Toronto, M4N 3M5, Canada. Department of Pathology, Christian Medical College, Vellore , Tamil Nadu, India. Department of Pulmonary Medicine, Christian Medical College, Vellore , Tamil Nadu, India. Department of Thoracic Surgery, Christian Medical College, Vellore , Tamil Nadu, India. CONTEXT AND AIMS: Inflammatory myofibroblastic tumour (IMT) is a rare mesenchymal neoplasm with intermediate malignant potential. The aim of this study is to describe and compare the clinical presentation, computed tomography (CT) findings and anaplastic lymphoma kinase -1 (ALK-1) expression of IMT of the thorax in children and adults. We also sought to study the tumour behaviour after treatment on the follow-up imaging. MATERIALS AND METHOD: This is a retrospective observational study of 22 histopathologically proven cases of IMT in the thorax. The clinical parameters, CT findings, biopsy results, treatment received and follow-up were recorded. Statistical analysis was performed using Fisher's exact test. RESULTS: IMT of the thorax had diverse imaging appearances, presenting either as large invasive lung masses with or without calcifications or as smaller endobronchial lesions. Children commonly presented with long duration fever (P = 0.02) and large invasive lung masses (P = 0.026), whereas adults presented with long duration haemoptysis (P = 0.001) and endobronchial lesions or smaller lung parenchymal lesions. Calcifications were more common in children (P = 0.007). ALK-1 was positive in 40% of children and 18.2% of adults (P = 0.547). Endobronchial lesions showed a trend for ALK-1 negativity. Patients with	NAT	JUL TO DEC	Radiology, Pathology, Pulmonary Medicine, Thoracic Surgery	PMID: 33273759 PMC:7694718

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	bronchoscopic excision had local recurrence and patients with surgical wedge resection had metastatic brain lesions as compared to those with lobectomy and pneumonectomy (P = 0.0152). A patient with unresectable lung mass had malignant transformation to spindle cell sarcoma after 9.5 years. CONCLUSIONS: Thoracic IMT presents with some distinct clinical and CT findings in adults and children. The CT findings and management options have implications for prognosis. If resectable, lobectomy is a better option than wedge resection or bronchoscopic excision for preventing local recurrence and metastasis. IMT can undergo malignant transformation.				
225.	<p>Isaac, B. T. J., Kirupakaran, H., Barney, A. M. and Christopher, D. J. Lessons from healthcare personnel screening and management during H1N1 pandemic in preparation for the impending COVID-19 pandemic in a tertiary care hospital in India Indian J Tuberc; 2020, 67 (4S): S122-S127 Address: Department of Pulmonary Medicine, Christian Medical College, Vellore, 632004, India. Electronic Address: barneyisaac98@cmcvellore.ac.in. Department of Student and Staff Health Service, Christian Medical College, Vellore, India. Department of Clinical Genetics, Christian Medical College, Vellore, India. Department of Pulmonary Medicine, Christian Medical College, Vellore, India. BACKGROUND: In the wake of the COVID-19 pandemic caused by a novel corona virus, health care personnel are at increased risk of acquiring the infection. In preparation for the management of health care personnel that are likely to be infected, we looked in to the data collected during the Influenza pandemic in 2009, caused by a novel strain of H1N1 influenza called swine flu. The care of healthcare personnel in our institution, who had an acute febrile respiratory illness (AFRI) during that period was routed through a single channel using a uniform protocol. We retrospectively analysed the available data, during the initial four months of the pandemic, to draw lessons from it. OBJECTIVE: To study the prevalence, clinical profile and risk factors of swine flu among health care personnel during the pandemic of 2009 in a tertiary care hospital in South India. METHODOLOGY: This retrospective study enrolled all the health care personnel including students of a tertiary care institution in South India, who presented with an AFRI between June to August, the initial four months of the swine flu pandemic of 2009. The clinical profile and risk factors were extracted. The results of the RT PCR for swine flu was obtained. Prevalence in each demographic group was calculated and compared. Characteristics of those with swine flu were compared with those who turned negative for the swine flu. RESULTS: The prevalence of all AFRI and only swine flu among health care personnel during the study period was 18 per thousand and 8.7 per thousand respectively. Highest prevalence of swine flu was found among students and office staff. After adjusting for confounding factors, hyperthermia at presentation was significantly higher {OR = 1.97; 95% CI [1.01-3.76]} among those who tested positive for swine flu as compared with those with other AFRI's. Only</p>	NAT	JUL TO DEC	Pulmonary Medicine, Student and Staff Health Service, Clinical Genetics	PMID: 33308657 PMC:7388779

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	2.5% of the entire AFRI group required admission and there was no mortality. CONCLUSION: Health care personnel are at increased risk of acquiring infection. Our study demonstrated that students and office staff were the most susceptible. Unprotected exposure to unknown infectious patients and relatives is likely to have been an important factor. Though the mode of transmission is similar, compared to H1N1, COVID-19 is associated with different comorbidities and has significantly higher mortality. Therefore, in preparation for the COVID-19 pandemic, the personal protective equipment of the healthcare personnel need to be escalated.				
226.	Isaac, B., Christopher, D., Sekar, R. and Thangakunam, B. Is smear microscopy obsolete in the era of Xpert MTB/Rif? European Respiratory Journal; 2020, 56 Address: [Isaac, Barney; Christopher, Devasahayam; Sekar, Rajasekar; Thangakunam, Balamugesh] Christian Med Coll & Hosp, Dept Pulm Med, Vellore, Tamil Nadu, India. barneyisaac98@cmcvellore.ac.in	INT	JUL TO DEC	Pulmonary Medicine	WOS:000606501400460
227.	Iyadurai, R., Gunasekaran, K., Jose, A. and Pitchaimuthu, K. Calotropis poisoning with severe cardiac toxicity A case report J Family Med Prim Care; 2020, 9 (8): 4444-4447 Address: Department of Medicine, Christian Medical College, Vellore, Tamil Nadu, India. Department of Biochemistry, Christian Medical College, Vellore, Tamil Nadu, India. Department of Division of Critical Care, Christian Medical College, Vellore, Tamil Nadu, India. Calotropis is a widely prevalent plant in the Indian Subcontinent. The extract and various parts of the plant are used by traditional healers for treating miscellaneous diseases. All parts of the plants are toxic; there are many case reports of gastrointestinal, cutaneous and ocular toxicity with Calotropis. The plant contains Cardenolide glycosides which have Digoxin like effects and can cause severe cardiotoxicity. We report a patient who developed cardiovascular collapse after oral ingestion and cutaneous application of Calotropis following snake bite by a traditional healer, this case thus highlights the potential cardiotoxicity of Calotropis.	NAT	JUL TO DEC	Medicine, Biochemistry, Division of Critical Care	PMID: 33110881 PMC:7586564
228.	Jabarkheel, R., Amayiri, N., Yecies, D., Huang, Y. H., Toescu, S., Nobre, L., Mabbott, D. J., Sudhakar, S. V., Malik, P., Laughlin, S., Swaidan, M., Al Hussaini, M., Musharbash, A., Chacko, G., Mathew, L. G., Fisher, P. G., Hargrave, D., Bartels, U., Tabori, U., Pfister, S. M., Aquilina, K., Taylor, M. D., Grant, G. A., Bouffet, E., Mankad, K., Yeom, K. W. and Ramaswamy, V. Molecular correlates of cerebellar mutism syndrome in medulloblastoma Neuro-Oncology; 2020, 22 (2): 290-297 Address: [Jabarkheel, Rashad; Yecies, Derek; Huang, Yuhao; Bartels, Ute; Tabori, Uri; Grant, Gerald A.] Stanford Univ, Sch Med, Dept Neurosurg, Stanford, CA 94305 USA. [Amayiri, Nisreen] King Hussein Canc Ctr, Dept Oncol, Amman, Jordan.	INT	JAN TO JUN	Radiology	WOS:000518531900015 SCOPUS H-INDEX:113 IF: 10.091 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>[Amayiri, Nisreen; Nobre, Liana; Mabbott, Donald J.; Bouffet, Eric; Ramaswamy, Vijay] Hosp Sick Children, Div Haematol Oncol, Toronto, ON, Canada. [Toescu, Sebastian; Hargrave, Darren] UCL, Great Ormond St Inst Child Hlth, London, England. [Mabbott, Donald J.] Univ Toronto, Dept Psychol, Toronto, ON, Canada. [Mabbott, Donald J.] Hosp Sick Children, Programme Neurosci & Mental Hlth, Toronto, ON, Canada. [Sudhakar, Sniya, V; Malik, Prateek] Christian Med Coll & Hosp, Dept Radiol, Vellore, Tamil Nadu, India. [Laughlin, Suzanne] Hosp Sick Children, Div Neuroradiol, Toronto, ON, Canada. [Swaidan, Maisa] King Hussein Canc Ctr, Dept Diagnost Radiol, Amman, Jordan. [Al Hussaini, Maysa] King Hussein Canc Ctr, Dept Pathol, Amman, Jordan. [Musharbash, Awni] King Hussein Canc Ctr, Dept Surg, Amman, Jordan. [Chacko, Geeta] Christian Med Coll & Hosp, Dept Pathol, Vellore, Tamil Nadu, India. [Mathew, Leni G.] Christian Med Coll & Hosp, Dept Pediat, Vellore, Tamil Nadu, India. [Fisher, Paul G.] Stanford Univ, Dept Neurol, Palo Alto, CA 94304 USA. [Fisher, Paul G.] Stanford Univ, Dept Pediat, Palo Alto, CA 94304 USA. [Pfister, Stefan M.] Heidelberg Univ Hosp, German Canc Consortium, German Canc Res Ctr, Hopp Childrens Canc Ctr Heidelberg, Div Pediat Neu, Heidelberg, Germany. [Pfister, Stefan M.] Heidelberg Univ Hosp, Dept Pediat Hematol & Oncol, Heidelberg, Germany. [Aquilina, Kristian] Great Ormond St Hosp Sick Children, Neurosurg Dept, London, England. [Taylor, Michael D.] Hosp Sick Children, Div Neurosurg, Toronto, ON, Canada. [Taylor, Michael D.; Ramaswamy, Vijay] Univ Toronto, Dept Med Biophys, Toronto, ON, Canada. [Taylor, Michael D.; Ramaswamy, Vijay] Hosp Sick Children, Programme Dev & Stem Cell Biol, Toronto, ON, Canada. [Mankad, Kshitij] Great Ormond St Hosp Sick Children, Dept Radiol, London, England. [Yeom, Kristen W.] Stanford Univ, Sch Med, Lucile Packard Childrens Hosp, Dept Radiol, Palo Alto, CA 94304 USA.</p> <p>Ramaswamy, V (reprint author), Hosp Sick Children, 555 Univ Ave, Toronto, ON M5G 1X8, Canada.; Yeom, KW (reprint author), Lucile Packard Childrens Hosp, 725 Welch Rd, MC 5654, Palo Alto, CA 94304 USA.</p> <p>kyeom@stanford.edu; vijay.ramaswamy@sickkids.ca</p> <p>Background. Cerebellar mutism syndrome (CMS) is a common complication following resection of posterior fossa tumors, most commonly after surgery for medulloblastoma. Medulloblastoma subgroups have historically been treated as a single entity when assessing CMS risk; however, recent studies highlighting their clinical heterogeneity suggest the need for subgroup-specific analysis. Here, we examine a large international multicenter cohort of molecularly characterized medulloblastoma patients to assess predictors of CMS. Methods. We assembled a cohort of 370 molecularly characterized medulloblastoma subjects with available neuroimaging from 5 sites globally, including Great Ormond Street Hospital, Christian Medical College and Hospital, the Hospital for Sick Children, King Hussein Cancer Center, and Lucile Packard Children's Hospital. Age at diagnosis, sex, tumor volume, and CMS development were assessed in addition to molecular subgroup. Results. Overall, 23.8% of patients developed CMS. CMS patients were younger (mean difference -2.05 years 0.50, P = 0.0218) and had larger tumors</p>				

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	(mean difference 10.25 cm ³) +/- 4.60, P = 0.0010) that were more often midline (odds ratio [OR] = 5.72, P < 0.0001). In a multivariable analysis adjusting for age, sex, midline location, and tumor volume, Wingless (adjusted OR = 4.91, P = 0.0063), Group 3 (adjusted OR = 5.56, P = 0.0022), and Group 4 (adjusted OR = 8.57 P = 9.1 x 10 ⁻⁵) tumors were found to be independently associated with higher risk of CMS compared with sonic hedgehog tumors. Conclusions. Medulloblastoma subgroup is a very strong predictor of CMS development, independent of tumor volume and midline location. These findings have significant implications for management of both the tumor and CMS.				
229.	Jacob John, T. and Dharmapalan, D. The time to begin plans for COVID-19 eradication is now Christian Journal for Global Health; 2020, 7 (4): 47-51 Address: Department of Clinical Virology, Christian Medical College, Vellore, India Paediatric Infectious Diseases at Apollo Hospitals, Navi Mumbai, India After the world recovers from the pandemic of SARS-CoV-2, it is most likely to stabilise as endemic and seasonal, deserving/demanding control efforts perpetually in all countries, unless it can be eradicated. The risk of mortality is high among those above 65 years and those with chronic "lifestyle" diseases. Endemic circulation will, therefore, take a heavy toll on life annually. Eradication is an extreme form of control, eliminating the disease permanently and globally. Effective vaccines are expected in the near future. As the pandemic abates, herd immunity will be very high, enabling early eradication by additional build-up of a vaccine-induced herd immunity. Public memory of the pandemic will be fresh, which will assist in social mobilisation and fund raising towards eradication. If time is lost, the infection is likely to become non-eradicable as domestic/farmed animals may become fresh reservoirs. Resolve to eradicate and designing its road-map must be made at the earliest. © 2020 Center for Health in Mission. All rights reserved.	NAT	JUL TO DEC	CLINICAL VIROLOGY	SCOPUS
230.	Jacob, J. J., Rachel, T., Shankar, B. A., Gunasekaran, K., Iyadurai, R., Anandan, S. and Veeraraghavan, B. MLST based serotype prediction for the accurate identification of non typhoidal Salmonella serovars Mol Biol Rep; 2020, 47 (10): 7797-7803 Address: Department of Clinical Microbiology, Christian Medical College and Hospital, Vellore , Tamil Nadu, 632004, India. Department of Medicine, Christian Medical College and Hospital, Vellore , Tamil Nadu, 632004, India. Department of Clinical Microbiology, Christian Medical College and Hospital, Vellore , Tamil Nadu, 632004, India. vbalaji@cmcvellore.ac.in. Traditional serotyping based on the phenotypic variation of O- and H-antigen remains as the gold-standard for the identification and classification of Salmonella isolates for last 70 years. Although this classification is a globally recognized	INT	JUL TO DEC	Clinical Microbiology, Medicine	PMID: 33001311

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	nomenclature, huge diversity of Salmonella serotypes have made the serovar identification to be very complex. Seven gene multilocus sequence typing (MLST) on the other hand can provide serovar prediction as well as the evolutionary origin between the serovars. In this study non typhoidal Salmonella (NTS) strains (n = 45) isolated from clinical samples (blood, faeces and pus) were identified by traditional phenotypic serotyping and biochemical testing. All the tested Salmonella isolates were designated as serovar Typhimurium based on phenotyping. However, by MLST 60% (27/45) of the isolates were S. Typhimurium, 35.5% (16/45) were S. Agona (ST13), 2.2% (1/45) were S. Kentucky (ST198) and 2.2% (1/45) were S. Saintpaul (ST27). MLST analysis assigned S. Typhimurium isolates as ST36 (18/127), ST19 (7/27) and ST313 (2/27). Mismatches in serovar designation between MLST database and phenotypic serotyping can be due to the misinterpretation of phenotypic serotyping as the antigenic structures of S. Typhimurium, S. Agona differs by a surface antigen. MLST based phylogeny of study isolates showed clustering according to sequence types. Concordance between MLST based sequence type and phenotypic serotype is important to provide insights into genetic population structure of Salmonella.				
231.	<p>Jacob, J. J., Solaimalai, D., Muthuirulandi Sethuvel, D. P., Rachel, T., Jeslin, P., Anandan, S. and Veeraraghavan, B.</p> <p>A nineteen-year report of serotype and antimicrobial susceptibility of enteric non-typhoidal Salmonella from humans in Southern India: changing facades of taxonomy and resistance trend</p> <p>Gut Pathog; 2020, 12 49</p> <p>Address: Department of Clinical Microbiology, Christian Medical College and Hospital, Vellore, Tamil Nadu 632004 India. GRID: grid.11586.3b. ISNI: 0000 0004 1767 8969</p> <p>BACKGROUND: The steady increase in the proportion of Non-typhoidal Salmonella (NTS) infections in humans represents a major health problem worldwide. The current study investigated the serovar distribution and antimicrobial susceptibility trends of NTS isolated from faecal samples during the period 2000-2018.</p> <p>METHODS: Faecal specimens of patients were cultured according to standard lab protocol. The isolates were serotyped and antimicrobial susceptibility testing (AST) were performed according to CLSI guidelines. RESULTS: A total of 1436 NTS isolates were obtained from faeces samples mostly comprising of S. Typhimurium (27.3%), S. Weltevreden (13%), S. Bareilly (11%), S. Newport (4.2%), S. Cholerasuis (4%), S. Infantis (3.4%), and S. Enteritidis (2.4%). Resistance to nalidixic acid (26%) was most common among the tested NTS, followed by ampicillin (18.5%), cotrimoxazole (13.5%), ciprofloxacin (12%), ceftriaxone (6.3%) and chloramphenicol (3.6%). Multidrug resistance was observed in 5% of NTS isolates with the highest rate (10.52%) in 2014. The incidence of NTS infection was maximum in children < 5 years of age with an average 19.3% of the total affected patients during the time period. CONCLUSIONS: Based on this study, the faecal NTS isolates have high resistance rates against first line antimicrobial agents</p>	INT	JUL TO DEC	Clinical Microbiology	<p>PMID: 33110449</p> <p>PMC:7585187</p>

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	except chloramphenicol. The gradual but consistent increase in resistance to fluoroquinolones, third generation cephalosporins and macrolide may restrict future treatment options. Hence periodic monitoring of NTS infections, serotype distribution and antimicrobial resistance trend is recommended.				
232.	<p>Jacob, J. J., Vasudevan, K., Veeraraghavan, B., Iyadurai, R. and Gunasekaran, K. Genomic Evolution of Severe Acute Respiratory Syndrome Coronavirus 2 in India and Vaccine Impact Indian J Med Microbiol; 2020, 38 (2): 210-212 Address: Division of Molecular Biology and Translational Bioinformatics, Department of Clinical Microbiology, Christian Medical College, Vellore, Tamil Nadu, India. Hilda Lazarus Core Research Chair, Christian Medical College, Vellore, Tamil Nadu, India. Department of General Medicine, Unit V, Christian Medical College, Vellore, Tamil Nadu, India. Department of General Medicine, Unit V, Christian Medical College, Vellore, Tamil Nadu, India. Electronic address: karthikgunasekaran@yahoo.com.</p> <p>Recent emergence of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and subsequent containment procedures have impacted the world as never seen before. Therefore, there is considerable curiosity about the genome evolution related to the origin, transmission and vaccine impact of this virus. We have analysed genome sequences of SARS-CoV-2 isolated from Indian patients to gain an in-depth understanding of genomic evolution and transmission in India. Phylogenetic analysis and mutation profiling revealed major lineages being evolved by characteristic mutations. As the mutation frequency in spike protein is comparatively lesser, the candidate vaccines expected to have wide coverage worldwide including India.</p>	NAT	JAN TO JUN	Clinical Microbiology, General Medicine Unit V	PMID:33589060
233.	<p>Jacob, J., Mathew, S. K., Chacko, R. T., Aruldas, B. W., Singh, A., Prabha, R. and Mathew, B. S. Systemic exposure to 5-Fluorouracil and its metabolite, 5,6-dihydrofluorouracil, and development of a limited sampling strategy for therapeutic drug management of 5-Fluorouracil in patients with gastrointestinal malignancy Br J Clin Pharmacol; 2020, Address: Department of Pharmacology and Clinical Pharmacology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Department of Medical Oncology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India.</p> <p>AIM: 5-Fluorouracil (5-FU) is widely used in combination chemotherapy, and literature suggests pharmacokinetic (PK) guided dosing to improve clinical efficacy and reduce toxicity. This study aimed to determine the pharmacokinetic exposure of both 5-FU and its metabolite 5,6-dihydrofluorouracil (DHFU), in patients with</p>	INT	JAN TO JUN	Pharmacology and Clinical Pharmacology, Medical Oncology	PMID:32592630 H-INDEX:137 IF: 3.867 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	gastrointestinal malignancy and to establish a simplified strategy to assist in therapeutic drug management (TDM) for dose optimization. METHODS: This was a prospective, observational study, performed in 27 patients diagnosed with gastrointestinal malignancy who were prescribed 5-FU. Multiple samples were collected per patient over the slow bolus (15-20 min) and continuous infusion period (over 44 hours) in dose one and three, and the concentrations of 5-FU and DHFU were measured. RESULTS: A higher proportion of patients had exposures within the therapeutic range in dose three (50%) as compared to dose one (37.5%) with 5-FU. There was an association between delayed T(max) of DHFU and a high C(max) of 5-FU. A limited sampling strategy (LSS) was developed with four samples, two during the bolus period and two during the continuous (CI) period (at 18 hours and the end of infusion), which accurately predicted the total AUC of 5-FU. CONCLUSION: Using BSA based dosing with 5-FU, 50-60% of patients were outside of the therapeutic range. In the absence of genotype testing, measurement of the metabolite DHFU could be a phenotypical measure of DPD enzyme activity. An LSS was developed in patients who were prescribed a combination regimen of slow bolus, followed by a 44-hour continuous infusion of 5-FU to assist in the TDM of patients.				
234.	<p>Jacob, K. S. Insight in psychosis: A critical review of the contemporary confusion Asian J Psychiatr; 2020, 48 101921</p> <p>Address: Christian Medical College, Vellore, 632002, India. Electronic Address: ksjacob1959@gmail.com.</p> <p>This commentary highlights the context, complexity, conflicting claims and the contemporary confusion related to insight in people with psychosis. Traditional psychiatric precepts suggests that good insight is inversely related to the severity of psychotic symptoms and directly related to depression scores, better clinical outcome, and treatment adherence. However, recent studies have recognised that insight does not predict outcomes, changes over time, and is dependent on the trajectory of the individual's illness and the social and cultural context arguing that "insight" is an explanatory model and a coping strategy. Methodological issues related to the assessment of insight, the limitations of psychiatric classification and complex interaction between biology and the environment make simplistic explanations of the concept of insight less than useful. The paper argues that the biomedical model should be presented without dismissing or devaluing patient beliefs and explanations. Psychiatry needs to embrace the complexity of mental illness and value diverse attempts at restoring homeostasis.</p>	INT	JAN TO JUN	Psychiatry	<p>PMID:31918309 WOS:000528851200030 SCOPUS H-INDEX:29 IF: 1.141 BIOXBIO (2018/2019)</p>
235.	<p>Jacob, K. S. Reforming medical education in India: Evolution before revolution Natl Med J India; 2020, 33 (1): 51-52</p>	NAT	JAN TO JUN	Psychiatry	<p>PMID:33565489</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Address: Department of Psychiatry, Christian Medical College, Vellore, Tamil Nadu, India.</p>				
236.	<p>Jacob, M. S., Gunasekaran, K., Miraclin, A. T., Sadiq, M., Kumar, C. V., Oommen, A., Koshy, M., Mishra, A. K. and Iyadurai, R. Clinical Profile and Outcome of Patients with Cerebral Venous Thrombosis Secondary to Bacterial Infections Ann Indian Acad Neurol; 2020, 23 (4): 477-481 Address: Department of General Medicine, Christian Medical College, Vellore, Tamil Nadu, India. Department of Neurological Science, Christian Medical College, Vellore, Tamil Nadu, India. BACKGROUND: Cerebral venous thrombosis (CVT) secondary to infectious aetiology has become rare in the antibiotic era, but is still encountered in clinical practice occasionally. In this study, we describe the clinical profile, diagnosis, and management of patients with CVT secondary to an infectious aetiology. METHODS: This retrospective study included all adult patients over 15 years (1 January 2002 to 1 January 2017). Adult patients with a diagnosis of infective CVT secondary to bacterial infections were included in the study. RESULTS: Totally, 22 patients were identified with CVT complicating bacterial infections. The focus of infection in 12 (54.54%) patients was pyogenic meningitis, 9 (40.9%) patients had a parameningeal focus and one patient developed CVT secondary to bacterial sepsis from a remote focus. Fever was the most common symptom seen in 77.3% followed by headache and depressed sensorium in 72.7% and 63.6%, respectively. The most common organism in the meningitis group was Streptococcus species, and in the parameningeal group was Staphylococcus aureus. At presentation MRI identified CVT in all 7 patients as compared to CT brain with contrast in 2/3 (66.6%). Transverse sinus was the most commonly involved sinus in meningitis. All patients were treated with appropriate antibiotics and anticoagulation was used in 50% of the patients. The in hospital, mortality was 9%. CONCLUSION: Septic CVT, though rare can be a complication of bacterial meningitis and facial infections. Clinical symptoms that suggest a co-existing CVT should be identified and diagnosed at the earliest. The mainstay of treatment is antibiotics; the role of anticoagulation is controversial.</p>	NAT	JUL TO DEC	General Medicine, Neurological Sciences	<p>PMID: 33223663 PMC:7657302</p>
237.	<p>Jacob, S. V., Sathyamurthy, A., Ramireddy, J. K., Thomas, A., Singh, K. and Ram, T. S. Neuroendocrine carcinoma of the uterine cervix: 15-year experience from a tertiary care centre in Southern India Journal of Radiotherapy in Practice; 2020, Address: Department of Radiation Oncology, Ida B Scudder Cancer Centre, Christian Medical College, Vellore, India Department of Gynecologic Oncology, Christian Medical College, Vellore, India Aim: To analyse the presentation, treatment strategies and outcomes of</p>	INT	JAN TO JUN	Radiation Oncology, Gynecologic Oncology	<p>SCOPUS H-INDEX:13 IF: 0.410 RESURCHIFY (2018/2019)</p>

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	neuroendocrine carcinoma of cervix treated with multi-modality approach at our institute. Materials and methods: The data of patients diagnosed to have cervical cancer between October 2004 and November 2018 were retrieved, and 14 patients of neuroendocrine carcinoma cervix who received treatment in our institution were identified. The patients were analysed based on demographic characteristics, disease stage, pathological characteristics, treatment and follow-up. The median overall survival and disease-free survival were calculated. Results: Median follow-up period was 8 months (range 1-52 months). Six patients died within 4 months of completion of treatment due to disease progression. Median overall survival was 12 months and median disease-free interval was 5.5 months. Four of the patients who underwent combined modality treatment consisting of neoadjuvant chemotherapy, concurrent chemoradiation therapy and brachytherapy are still on regular follow-up and are disease-free. Conclusion: Neuroendocrine carcinoma of the cervix is a rare but aggressive histological subtype. Combined modality approach with judicious use of systemic chemotherapy along with surgery and radiation therapy is essential for optimal outcomes. © The Author(s).				
238.	<p>Jacob, T. J. K., James Sam, C., Jacob Kurian, J., Karl, I. S., Kisku, S. M. C. and Sen, S. Transureteroureterostomy as an adjunctive antireflux procedure in children undergoing bladder augmentation for neurogenic bladder with major reflux J Pediatr Urol; 2020, 16 (2): 190.e1-190.e6</p> <p>Address: Department of Paediatric Surgery, Christian Medical College, Vellore, India. Electronic Address: tarunjki@gmail.com. Department of Paediatric Surgery, PSG Medical College and Hospital, Coimbatore, India. Department of Paediatric Surgery, Christian Medical College, Vellore, India. Department of Paediatric Surgery, Christian Medical College, Vellore, India; Department of Paediatric Surgery, PSG Medical College and Hospital, Coimbatore, India.</p> <p>INTRODUCTION: Transureteroureterostomy (TUU) provides urinary drainage of both renal systems to the bladder via a single ureter and is useful in selected situations of complex urological reconstructions. Herein we discuss its use, advantages and complications in children with neurogenic bladders and high-grade (4/5) reflux who have undergone augmentation cystoplasty. PATIENTS AND METHODS: Children with neurogenic bladder complicated by unilateral or bilateral high-grade vesicoureteric reflux (VUR), who underwent TUU along with augmentation cystoplasty (BA), were selected from two institutions. Eighteen children with an average age of 5 years at presentation were identified from a retrospective chart review. RESULTS: All had bilateral hydronephrosis (HUN) of which there were 30 refluxing megaureters. While BA reduced bladder pressure, VUR was managed by refluxing to non-refluxing TUU in six cases with unilateral VUR and unilateral reimplantation with TUU to the reimplanted ureter</p>	INT	JAN TO JUN	Paediatric Surgery	<p>PMID:31932241 WOS:000538166900020 SCOPUS</p> <p>H-INDEX:41 IF: 1.736 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	in 12 cases of bilateral VUR, thus minimizing reimplantation to 12 of 30 ureters. The average time of follow-up was 51 months. Follow-up cystograms showed complete resolution of VUR in all. HUN improved/stabilized in all but one child. Serum creatinine remained normal in all but two cases. Other advantages of TUU include the use of the distal ureter as a catheterizable channel and ease of undiversion when the ureter has been diverted as a ureterostomy. An unusual complication of a TUU site stricture is discussed and the innovative technique of using a cecal patch to salvage the anastomosis is detailed. CONCLUSION: We conclude that a TUU is a safe and useful adjunctive procedure in children undergoing BA for neurogenic bladder with high-grade VUR, minimizing the need for ureteric reimplant in an unhealthy bladder.				
239.	<p>Jain, N., Jasper, A., Vanjare, H. A., Mannam, P. and Mani, S. E. The role of imaging in skull base osteomyelitis - Reviewed Clin Imaging; 2020, 67 62-67</p> <p>Address: Department of Radiodiagnosis, Christian Medical College, Ida Scudder Road, Vellore 632004, Tamil Nadu, India. Department of Radiodiagnosis, Christian Medical College, Ida Scudder Road, Vellore 632004, Tamil Nadu, India. Electronic Address: anithapjp@gmail.com.</p> <p>PURPOSE: Skull base osteomyelitis (SBO) is difficult to diagnose due to a wide array of clinical presentations. It can be life threatening if not treated promptly. The objective of this study is to identify the various neck spaces involved in skull base osteomyelitis, correlate them with the possible source of infection and identify the related complications. METHODS: Eighty-nine consecutive either culture proven cases of skull base osteomyelitis, or culture negative cases with inflammation on histopathology responding to antibiotic therapy, presenting at a single non-government hospital in south India between January 2016 and December 2018 were included in this study. Images were reviewed by two radiologists and imaging findings were documented by consensus. RESULTS: Involvement of the parotid space, retromastoid space and (temporomandibular) TM joint was associated with otogenic source of infection (p value < 0.05); while, retropharyngeal/prevertebral involvement was associated with sphenoid and nasopharyngeal sources (p value < 0.05). Complications such as cavernous sinus thrombosis (p value = 0.023) and ICA involvement (p value = 0.014) were more commonly seen with central skull base osteomyelitis. Abscess formation was seen in all three groups of patients without a significant difference between the groups. CONCLUSION: Imaging plays an important role in determining the possible source of infection by identifying the involved neck spaces and this in turn can guide the clinician to a site for biopsy. Complications related to SBO can also be identified on imaging and can guide appropriate management.</p>	INT	JAN TO JUN	Radiodiagnosis	<p>PMID:32526659 SCOPUS H-INDEX:46 1.136 BIOXBIO (2018/2019)</p>
240.	Jaleel, R., Simon, E. G., Gupta, P., Patnaik, I., David, D. and Chowdhury, S. D. Retained biliary plastic stents - lest we forget	INT	JUL TO DEC	Gastroenterology	PMID: 32762304

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Trop Doct; 2020, 49475520945443 Address: Assistant Professor, Department of Gastroenterology, Christian Medical College, Vellore, Tamil Nadu, India. Professor, Department of Gastroenterology, Christian Medical College, Vellore, Tamil Nadu, India. Endoscopy Fellow, Department of Gastroenterology, Christian Medical College, Vellore, Tamil Nadu, India. Associate Professor, Department of Gastroenterology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Prolonged indwelling of endoscopically placed biliary plastic stents may lead to complications. We conducted a retrospective analysis of patients who underwent endoscopic retrograde cholangio-pancreaticography (ERCP) at our centre in 2017 and were noted to have retained biliary plastic stents (> 3 months after an index ERCP). A total of 127 patients had previously placed biliary plastic stents, out of which 45 (35.4%) were retained. The median age of the latter was 52 years (range = 22-79 years) with 27 (60%) patients being men. The median duration of the retained stents was 144 days (range = 94-3292 days). The majority of the patients were asymptomatic. However, 9 (20%) patients had cholangitis, 2 (4.4%) had choledocholithiasis, 2 (4.4%) had cholangitic abscess and 1 (2.2%) developed septicaemia. Fortunately, all these complications could be managed medically and endoscopically. Retention of biliary plastic stents is a problem often overlooked and underestimated in clinical practice. Various measures need to be instituted to create awareness of this entity to prevent undesirable outcomes.</p>				
241.	<p>James, J. V., Varghese, J., Mckie, A. T., Vaulont, S. and Jacob, M. Enhanced insulin signaling and its downstream effects in iron-overloaded primary hepatocytes from hepcidin knock-out mice Biochimica Et Biophysica Acta-Molecular Cell Research; 2020, 1867 (2): 13</p> <p>Address: [James, Jithu V.; Varghese, Joe; Jacob, Molly] Christian Med Coll & Hosp, Dept Biochem, Vellore 632002, Tamil Nadu, India. [Mckie, Andrew T.] Kings Coll London, Sch Med, Diabet & Nutr Sci Div, London, England. [Vaulont, Sophie] Univ Paris, CNRS, INSERM, Inst Cochin, F-75014 Paris, France. [Vaulont, Sophie] Lab Excellence GR Ex, Paris, France. Jacob, M (reprint author), Christian Med Coll & Hosp, Dept Biochem, Vellore 632002, Tamil Nadu, India. mjacob@cmcvellore.ac.in</p> <p>Background: Increased body iron stores have been implicated in the pathogenesis of diabetes mellitus. However, the molecular mechanisms involved are unclear. The liver plays a central role in homeostasis of iron and glucose in the body. Mice deficient in hepcidin (the central regulator of systemic iron homeostasis) (Hamp1(-/-) mice) accumulate iron in the liver in vivo. The effects of such iron loading on hepatic insulin signaling and glucose metabolism are not known. Methods:</p>	INT	JAN TO JUN	Biochemistry	<p>WOS:000508740900021 SCOPUS H-INDEX:165 IF: 4.379 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Hepatocytes isolated from Hamp1(-/-) mice were studied for markers of insulin signaling (and its downstream effects), glucose production, expression of gluconeogenic and lipogenic enzymes, and markers of AMPK (AMP-activated protein kinase) activation and oxidative stress. These parameters were studied both in the absence and presence of insulin, and also with the use of an iron chelator. Results: Akt in the insulin signaling pathway was found to be activated in the Hamp1(-/-) hepatocytes to a greater extent than wild-type (WT) cells, both under basal conditions and in response to insulin. Incubation of the Hamp1(-/-) hepatocytes with an iron chelator attenuated these effects. There was no evidence of oxidative stress or AMPK activation in the Hamp1(-/-) hepatocytes. Glucose production by these cells was similar to that by WT cells. Gene expression of key gluconeogenic enzymes was decreased in these cells. In addition, they showed evidence of increased lipogenesis. Conclusions: Hepatocytes from Hamp1(-/-) mice showed evidence of greater sensitivity to the effects of insulin than WT hepatocytes. This may explain the insulin-sensitive phenotype that has been reported in classical hemochromatosis.				
242.	Janet, N. B., Moni, V. T. M., Meena, J., Fouzia, N. A. and George, B. A Novel PDGFR beta Rearrangement in Systemic Mastocytosis with an Associated Haematologic Neoplasm Indian J Hematol Blood Transfus; 2020, 36 (4): 773-775 Address: [Janet, Nancy Beryl; Moni, V. T. Manoj; Meena, J.; Fouzia, N. A.; George, Biju] Christian Med Coll & Hosp, Dept Haematol, Vellore , Tamil Nadu, India. George, B (reprint author), Christian Med Coll & Hosp, Dept Haematol, Vellore , Tamil Nadu, India. bjju@cmcvellore.ac.in	NAT	JAN TO JUN	Clinical Hematology	PMID: 33100729 PMC: 7572975 WOS: 000532153800001 SCOPUS H-INDEX: 15 IF: 0.869 BIOXBIO (2018/2019)
243.	Jasper, A., Gibikote, S., Kirupakaran, H., Christopher, D. J. and Mathews, P. Is routine pre-entry chest radiograph necessary in a high tuberculosis prevalence country? J Postgrad Med; 2020, 66 (2): 90-93 Address: Department of Radiology, Christian Medical College, Vellore , Tamil Nadu, India. Department of Staff-Student Health Services, Christian Medical College, Vellore , Tamil Nadu, India. Department of Pulmonary Medicine, Christian Medical College, Vellore , Tamil Nadu, India. Department of Geriatric Medicine, Christian Medical College, Vellore , Tamil Nadu, India. CONTEXT: Chest radiographs have been used worldwide as a screening tool before employment and training, by various healthcare and other government and nongovernment institutions. Many studies done in the past have demonstrated a relatively low yield for tuberculosis detection and therefore, the authors have	NAT	JAN TO JUN	Radiology, Staff Student Health Services, Pulmonary Medicine, Geriatric Medicine	PMID: 32270779 PMC ID: PMC7239409 WOS: 000523498600007 SCOPUS H-INDEX: 50 IF: 1.316 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	questioned this practice. AIMS: To compare the value of the preadmission/employment chest radiograph in two groups, namely, those who have been previously exposed to a healthcare setting (post-exposure group) and those who have not been exposed (pre-exposure group) and to determine if there is a significant difference in tuberculosis detection between these two groups. SETTINGS AND DESIGN: A retrospective review of the reports of the chest radiographs of all candidates appearing for admission to various undergraduate and postgraduate courses in our institute between 2014 and 2017 was performed. MATERIALS AND METHODS: The various abnormalities detected were recorded and the findings in the two groups were compared. STATISTICAL ANALYSIS USED: Chi-square test was used to compare between two group proportions. RESULTS: Thirty out of 4333 (0.69%) candidates in the pre-exposure group and 53 out of 3379 (1.57%) candidates in the post-exposure group showed abnormalities on chest radiographs involving the lung parenchyma, mediastinum, heart, or pleura. In the pre-exposure group, six (0.14%) were found to have underlying cardiac disease and one (0.02%) had tuberculosis. Among the six candidates in the post-exposure group who underwent further investigations in our institute, five (0.15%) were diagnosed to have tuberculosis. Although there was no statistically significant difference in tuberculosis detection between the groups (P = 0.051), there is a trend towards higher detection of tuberculosis in the post-exposure group. CONCLUSIONS: In a country where the prevalence of tuberculosis is high, the pre-employment chest radiograph may still have a role in detecting tuberculosis in the post-exposure group.				
244.	Jayakanthan, K., Sandhya, P., Mohan, H. and Danda, D. Effect of Curcumin on pro-inflammatory cytokines in primary Sjogren's Syndrome Journal of Immunology; 2020, 204 (1): Address: [Jayakanthan, Kabeerdoss; Sandhya, Pulukkoll; Mohan, Hindhumathi; Danda, Debashish] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India.	INT	JUL TO DEC	Clinical Immunology and Rheumatology	WOS:000589972403022
245.	Jayasimha, S. and Chandrasingh, J. Response to commentary re 'Extracorporeal shock wave lithotripsy in Indian children: Predictors of outcome and validation of pre-treatment nomograms' J Pediatr Urol; 2020, Address: Urology, Christian Medical College, Vellore 632 004, TN, India. Urology, Christian Medical College, Vellore 632 004, TN, India. Electronic Address: chandrasingh@cmcvellore.ac.in .	INT	JUL TO DEC	Urology	PMID: 33309609
246.	Jayasimha, S., Marimuthu, S., Rajendran, G., Valson, A. T., Chandrasingh, J. and Kumar, S. Extracorporeal shock wave lithotripsy in Indian children: Predictors of outcome and validation of pre-treatment nomograms J Pediatr Urol; 2020, Address: Department of Urology, Christian Medical College, Vellore , 632004, Tamilnadu, India. Electronic Address: sudhindra.j@gmail.com . Department of Biostatistics, Christian Medical College, Vellore , 632004, Tamilnadu, India. Electronic Address: marimuthu8421@gmail.com .	INT	JUL TO DEC	Urology, Biostatistics, Nephrology	PMID: 33279435

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Department of Urology, Christian Medical College, Vellore, 632004, Tamilnadu, India. Electronic Address: kgeetha.rajendran@gmail.com.</p> <p>Department of Nephrology, Christian Medical College, Vellore, 632004, Tamilnadu, India. Electronic Address: ceruleus@gmail.com.</p> <p>Department of Urology, Christian Medical College, Vellore, 632004, Tamilnadu, India. Electronic Address: chandrasingh@cmcvellore.ac.in.</p> <p>Department of Urology, Christian Medical College, Vellore, 632004, Tamilnadu, India. Electronic Address: ektasantosh@cmcvellore.ac.in.</p> <p>BACKGROUND: Although multiple variables have been shown to affect outcomes in pediatric lithotripsy (ESWL), there is no consensus on the same. Nomograms combine multiple variables and provide an objective prediction of outcomes. Two nomograms have been previously described and validated in two studies from the same geographical area. External validation in multiple settings is needed, as a nomogram's performance may vary with time, geographical area and clinical scenario. OBJECTIVES: This study aimed to identify variables influencing pediatric ESWL outcomes, validate published nomograms and describe the clinical and metabolic profile of Indian children treated with ESWL. DESIGN: This retrospective cohort study included all children who underwent ESWL from 2002 to 2019 at a single centre. ESWL was performed under general anaesthesia. Mid and lower ureteric calculi were treated in prone and the rest in supine position. 1500-2000 shocks were delivered at a voltage of 12-16 kV. Data pertaining to patient characteristics, metabolic evaluation, imaging, ESWL details and post-procedure outcomes were obtained from the hospital information system and these variables, along with Onal and Doğan scores, were correlated with stone clearance. Cut-offs for Onal and Doğan scores were determined using receiver operator characteristic (ROC) curve analysis and compared with area under the curve (AUC). Complications, ancillary procedures and metabolic abnormalities were recorded. RESULTS: A total of 66 children (76 renal units) were included. Mean age was 5.5 years (Range 6 months-14 years) and median stone size, 12 mm (IQR 9, 15.25). Average treatment sessions were 1.8 ± 0.99. Median shocks in the stone-free group and those who failed treatment were 1750 (IQR 1500, 3000) and 3250 (IQR 1750, 4750) respectively. The remaining variables are depicted in Table 1. The stone free rate was 63.2%. Fragments <4 mm were seen in 19 (25%). Efficacy Quotient was 40. The AUC for Doğan nomogram (cut-off <199.5) was 0.761 while that for Onal nomogram (cut-off <2.5) was 0.762 and 0.771 after one and three shocks respectively. On multivariate analysis, age, multiple calculi, Onal and Doğan scores were predictive of clearance. Doğan score had higher specificity. Complications were seen in 16 (21%) and ancillary procedures needed in 7 (9.2%). Metabolic abnormalities were seen in 84.8%, the commonest being hyperoxaluria. Mixed stones were most frequent. CONCLUSIONS: Lithotripsy in children is safe and effective. Older age, presence of multiple calculi, higher Onal and Doğan scores are predictive of treatment failure.</p>				
247.	Jeba, J.	INT	JAN TO JUN	Palliative Care Unit	PMID:32527187

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Adding Fuel to the Fire! J Pain Palliat Care Pharmacother; 2020, 34 (3): 160-161</p> <p>Address: Jenifer Jeba MD (RT), Dip Pal Med, MSc Pal Med (Cardiff, UK), Professor, Palliative Care Unit, Christian Medical College Hospital, Vellore, India.</p>				H-INDEX:37 IF: 0.960 BIOXBIO (2018/2019)
248.	<p>Jeba, J., Ponissery, J., Ramaswamy, A., Johnson, J. R., Thelly, A. S. and Bilimoria, P. J. Developing Evidence-Based Clinical Guidelines in Palliative Care for Home Care Setting in India Indian J Palliat Care; 2020, 26 (3): 319-322</p> <p>Address: Palliative Care Unit, Christian Medical College Hospital, Vellore, Tamil Nadu, India. Department of Palliative Medicine, Specialist in Palliative Medicine, PD Hinduja Hospital, Mahim, Mumbai, Maharashtra, India. Department of Geriatric Medicine, Khoo Teck Puat Hospital, Singapore. Department of Education and Research, Bangalore Hospice Trust, Karunashraya, Bengaluru, Karnataka, India. Department of Palliative Medicine, Mahatma Gandhi Medical College and Research Institute, Pondicherry, India. Founder Trustee, Founder and Senior Management on Vision and Strategy, The Jimmy S Bilimoria Foundation, Mumbai, Maharashtra, India.</p> <p>BACKGROUND: Clinical guidelines can improve care and reduce variations in practice. With the growth of The Jimmy S Bilimoria Foundation's PALCARE, a home-based palliative care service launched in December 2015, the foundation felt a need for locally relevant, clinical guidelines to ensure consistency and reliability of its service. A Clinical Consultative Committee (CCC) comprising of experienced palliative care professionals, from within and outside India, was constituted to help with the development of robust, evidence-based multidisciplinary clinical guidelines relevant to the delivery of palliative care for adults in a home care setting in Mumbai, India, which could be applied to other similar settings in India and elsewhere. METHODOLOGY AND DEVELOPMENT: The CCC developed 39 guidelines under eight categories; using a structured process from the initial draft to its finalization. The CCC vetted each of the guidelines over monthly Skype meetings for validity, relevance, local applicability and reproducibility. Feedback from the PALCARE team was also incorporated. Thirty-nine clinical guidelines relevant to adult palliative care services in home care setting were developed. These have been discussed and found useful by the PALCARE team. The guidelines are available on the PALCARE website for use by wider professional audience. CONCLUSION: Development of clinical guidelines locally for palliative care in a home care setting in response to a felt need to ensure quality care and reduce variation in practice has been beneficial in clinical care. It has proved to be a good teaching resource too. Regular audits to measure practice against these guidelines will ensure better patient outcomes.</p>	NAT	JUL TO DEC	Palliative Care Unit	PMID:33311873 PMC ID:7725183
249.	Jeba, J., Singh, A. and Munday, D.	NAT	JUL TO DEC	Palliative Care, Radiotherapy	PMID: 33380709

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Indian Council of Medical Research consensus guidelines on 'Do Not Attempt Resuscitation': Communication is key Indian Journal of Medical Research; 2020, 152 (4): 427-+</p> <p>Address: [Jeba, Jenifer] Christian Med Coll & Hosp, Palliat Care Unit, Dept Radiotherapy, Vellore 632004, Tamil Nadu, India. [Singh, Ashita] Chinchpada Christian Hosp, Dept Internal Med & Palliat Care, Nandurbar, Maharashtra, India. [Munday, Dan] Univ Edinburgh, Usher Inst, Ctr Populat Hlth Sci, Edinburgh, Midlothian, Scotland. Jeba, J (corresponding author), Christian Med Coll & Hosp, Palliat Care Unit, Dept Radiotherapy, Vellore 632004, Tamil Nadu, India. jenifermugesh@yahoo.com</p>				WOS:000606862900015
250.	<p>Jeyapaul, S., Oommen, A. M., Cherian, A. G., Marcus, T. A., Malini, T., Prasad, J. H. and George, K. Feasibility, uptake and real-life challenges of a rural cervical and breast cancer screening program in Vellore, Tamil Nadu, South India Indian J Cancer; 2020, Address: Community Health Department, Christian Medical College, Vellore, Tamil Nadu, India. BACKGROUND: Early detection of breast and cervical cancer by organized screening has been found to reduce mortality rates in trials, but documentation of programme results and challenges is rarely done from non-trial settings. This study reports results of a population-based cancer control programme in a rural block in Vellore, Tamil Nadu, population size (116,085), targeting a population of 18,490 women aged 25-60 years, between November 2014 and March 2018. METHODS: Village-based health education sessions were conducted by social workers, using trained volunteers and health workers to motivate eligible women. Screening was done at a secondary level hospital, by trained general physicians using visual inspection with acetic acid and clinical breast examination, followed by colposcopy, radiological imaging (breast) and biopsy as required. RESULTS: A total of 8 volunteers and 17 health workers motivated women for 93 health education and screening sessions, in 46 out of 82 villages. While 1,890/18,490 (10.2 per cent) were screened for breast cancer, 1,783 (9.6 per cent) were screened for cervical cancer, with a yield of 3.4/1,000 for cervical pre-cancer/cancer. The main challenges were creating time for screening activities in a busy secondary hospital and difficulty in ensuring treatment completion of screen-detected cases. CONCLUSIONS: Population-based cancer screening programs can be offered by secondary hospitals that also run primary care services, to increase screening rates. Clear referral systems need to be established, bearing in mind that social factors, especially poor family support, may pose a threat to treatment, in spite of easy availability of cure.</p>	NAT	JUL TO DEC	Community Health Department	PMID: 33402583
251.	<p>Jindal, S. K., Aggarwal, A. N., Christopher, D. J., Dhar, R. and Jindal, A. Face masks - a sustainable measure to mitigate COVID-19 The international journal of tuberculosis and lung disease: the official journal of the International Union against Tuberculosis and Lung Disease; 2020, 24 (6): 645-647</p>	INT	JAN TO JUN	Pulmonary Medicine	WOS:000600572300025 SCOPUS H-INDEX:107 IF: 7.755 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Address: Postgraduate Institute of Medical Education and Research Chandigarh, India Department of Pulmonary Medicine, Postgraduate Institute of Medical Education and Research Chandigarh, India Department of Pulmonary Medicine, Christian Medical College, Vellore, India Department of Pulmonology, Fortis Hospital, Kolkata, India Jindal Clinics Chandigarh, India</p>				
252.	<p>Jiwanmall, M., Jiwanmall, S. A., Williams, A., Kamakshi, S., Sugirtharaj, L., Poornima, K. and Jacob, K. S. Preoperative Anxiety in Adult Patients Undergoing Day Care Surgery: Prevalence and Associated Factors Indian J Psychol Med; 2020, 42 (1): 87-92</p> <p>Address: Department of Anaesthesiology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Psychiatry, Christian Medical College, Vellore, Tamil Nadu, India. Department of Nursing, Christian Medical College, Vellore, Tamil Nadu, India. Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND: There is a paucity of data related to anxiety levels in patients undergoing day care surgery in India. METHODS: Preoperative anxiety was assessed using Amsterdam Preoperative Anxiety and Information Scale (APAIS) 1 day before surgery and on the day of surgery, and the patients were categorized as cases (APAIS score ≥ 13) and controls (APAIS score < 13). Sociodemographic characteristics, clinical features, and fears associated with anesthesia and surgery were also noted. RESULTS: Out of the 399 patients recruited, 58.1% experienced significant preoperative anxiety. The fear of needles ($P = 0.002$), fear of waking up during the surgery ($P < 0.001$), and the patient's need of additional information regarding anesthesia and surgery ($P < 0.001$) were significantly associated with preoperative anxiety. CONCLUSION: A significant proportion of patients scheduled for day care surgery have preoperative anxiety. A preanesthetic workup of a patient with adequate clarification about their doubts and fears related to anesthesia and surgery is recommended to bring down the level of anxiety.</p>	NAT	JAN TO JUN	Anaesthesiology, Psychiatry, Nursing, Biostatistics	PMID:31997870 PMC ID: PMC6970311 SCOPUS H-INDEX:20 IF: 1.605 BIOXBIO (2018/2019)
253.	<p>Job, M., Mathuram, A. J., Turaka, V. P., Carey, R. A., Iyyadurai, R. and Rajan, S. J. Clinical spectrum, aetiology and predictors of acute febrile encephalopathy at a tertiary hospital in south India - A prospective observational study Trop Doct; 2020, 49475520967916</p> <p>Address: Assistant Professor, Department of Medicine, Christian Medical College, Vellore, India. Professor, Department of Medicine, Christian Medical College, Vellore, India. Associate Professor, Department of Medicine, Christian Medical College, Vellore, India.</p>	INT	JUL TO DEC	Medicine	PMID: 33115328

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Acute febrile encephalopathy is a common syndrome in the tropics with high mortality encountered by emergency physicians. In order to study the aetiology of acute febrile encephalopathy and its mortality and functional outcome over one year, data on all patients >18 years of age with short duration of fever (<14 days) and altered mental status were collected and followed up until one month after discharge. Non-infectious aetiology, found in 29%, portends a poor outcome.				
254.	<p>John, A. O., Paul, H., Vijayakumar, S., Anandan, S., Sudarsan, T., Abraham, O. C. and Balaji, V. Mortality from Acinetobacter Infections as Compared to Other Infections among Critically Ill Patients in South India: A Prospective Cohort Study Indian J Med Microbiol; 2020, 38 (1): 24-32 doi: 10.4103/ijmm.IJMM_19_492. Epub 2020 Dec 1.</p> <p>Address: Department of Medicine, Christian Medical College, Vellore, Tamil Nadu, India. Electronic address: ajoyoommenjohn@gmail.com. Department of Hospital Infection Control Committee, Christian Medical College, Vellore, Tamil Nadu, India. Department of Clinical Microbiology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Medicine, Division of Critical Care, Christian Medical College, Vellore, Tamil Nadu, India. Department of Medicine, Christian Medical College, Vellore, Tamil Nadu, India. Department of Microbiology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND: Acinetobacter baumannii has become a common pathogen causing hospital-acquired infections (HAIs). Although acquiring any nosocomial infection is associated with increased mortality, we do not know if the acquisition of Acinetobacter infection confers a worse prognosis as compared to non-Acinetobacter-related HAI. The aim of the current study is to compare the clinical outcomes of ventilator-associated pneumonia (VAP) and central line associated blood stream infections (CLABSIs) caused by A. baumannii with those caused by other bacterial pathogens. MATERIALS AND METHODS: This prospective cohort study was conducted among critically ill adults admitted to a tertiary care hospital in South India from January 2013 to June 2014. We enrolled patients who developed new-onset fever ≥48 h after admission and fulfilled pre-specified criteria for VAP or CLABSI. The patients were followed up until the primary outcomes of death or hospital discharge. RESULTS: During the study period, 4047 patients were admitted in the intensive care units, among which 129 eligible HAI events were analysed. Of these, 95 (73.6%) were VAP, 34 (26.4%) were CLABSI, 78 (60.4%) were A. baumannii-related HAI (AR-HAI) and 51 (39.6%) were non-A. baumannii-related HAI (NAR-HAI). Mortality among AR-HAI was 57.6% compared to 39.2% in NAR-HAI (P = 0.04) which on multivariate analysis did not achieve</p>	NAT	JAN TO JUN	Medicine, Hospital Infection Control Committee, Clinical Microbiology, Critical Care Unit	PMID:33589120 PMC 8433

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>statistical significance, although the trend persisted (odds ratio [OR] = 4.2, 95% confidence interval [CI]: 0.95-18.4, P = 0.06). The acquisition of VAP due to <i>A. baumannii</i> was associated with poor ventilator outcomes even after adjusting for confounders (adjusted OR = 3.5, 95% CI: 1.07-11.6, P = 0.04). CONCLUSION: In our cohort of critically ill adults with VAP and CLABSI, AR-HAI was associated with poor ventilator outcomes and a trend towards higher mortality. These findings add to the evidence suggesting that <i>A. baumannii</i> is a dangerous pathogen, perhaps even more so than others.</p>				
255.	<p>John, A., Chowdhury, S. D., Kurien, R. T., David, D., Dutta, A. K., Simon, E. G., Abraham, V., Joseph, A. J. and Samarasam, I. Self-expanding metal stent in esophageal perforations and anastomotic leaks Indian J Gastroenterol; 2020, 39 (5): 445-449 Address: Department of Gastroenterology, Christian Medical College, Vellore 632 004, India. Department of Gastroenterology, Christian Medical College, Vellore 632 004, India. sudiptadharchowdhury@gmail.com. Upper GI Surgery Unit, Division of Surgery, Christian Medical College, Vellore 632 004, India. BACKGROUND AND AIMS: Placement of self-expanding metal stents (SEMS) has emerged as a minimally invasive treatment option for esophageal perforation and leaks. The aim of our study was to assess the role of SEMS for the management of benign esophageal diseases such as perforations and anastomotic leaks. METHODS: All patients (n = 26) who underwent SEMS placement for esophageal perforation and anastomotic leaks between May 2012 and February 2019 were included. Data were analyzed in relation to the indications, type of stent used, complications, and outcomes. RESULTS: Indications for stent placement included anastomotic leaks 65% (n = 17) and perforations 35% (n = 9). Fully covered SEMS (FCSEMS) was placed in 25 patients, and in 1, partially covered SEMS (PCSEMS) was placed. Stent placement was successful in all the patients (n = 26). Four patients did not report for follow-up after stenting. Among the patients on follow-up, 91% (20/22) had healing of the mucosal defect. Stent-related complications were seen in 5 (23%) patients and included stent migration [3], reactive hyperplasia [1] and stricture [1]. CONCLUSION: Covered stent placement for a duration of 8 weeks is technically safe and clinically effective as a first-line procedure for bridging and healing benign esophageal perforation and leaks.</p>	NAT	JUL TO DEC	Gastroenterology	PMID: 33001339
256.	<p>John, J. and Kang, G. Public health during the pandemic in India Science; 2020, 370 (6517): 663-664 Address: Department of Community Health, Christian Medical College, Vellore TN, India. Division of Gastrointestinal Sciences, Christian Medical College, Vellore TN, India. gkang@cmcvellore.ac.in.</p>	INT	JUL TO DEC	Community Health, Division of Gastrointestinal Sciences.	PMID: 33154127
257.	<p>John, K. J., Sadiq, M., George, T., Gunasekaran, K., Francis, N., Rajadurai, E. and</p>	NAT	JAN TO JUN	Medicine	PMID:32411251

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Sudarsanam, T. D. Clinical and Immunological Profile of Mixed Connective Tissue Disease and a Comparison of Four Diagnostic Criteria Int J Rheumatol; 2020, 2020 9692030</p> <p>Address: Department of Medicine, Christian Medical College, Vellore 632004, India.</p> <p>Mixed connective tissue disease (MCTD) was initially described as a chronic immune-mediated disease with overlapping features of systemic lupus erythematosus, scleroderma, and polymyositis. We conducted a cross-sectional study to describe the clinical and immunological profile of patients with MCTD and to compare the four diagnostic criteria, namely, Sharp, Kasukawa, Alarcón-Segovia, and Khan criteria. A total of 291 patients who were admitted from June 2007 to June 2017 and fulfilled the inclusion criteria were included in the study. A clinical diagnosis of MCTD was made in 111 patients, of whom 103 (92.8%) were women. The mean age at presentation was 39.3 years (SD ± 11.6). The most common organ systems that were involved were musculoskeletal system (95.5%), skin and mucosa (78.4%), and the gastrointestinal and hepatobiliary systems (56%). The maximum sensitivity was for the Kasukawa criteria with a sensitivity of 77.5% (95% CI 68.4-84.6) and specificity of 92.2% (95% CI 87-95.5). The Kahn criteria and Alarcón-Segovia criteria had the maximum specificity; the Alarcón-Segovia criteria had a sensitivity of 69.4% (95% CI 59.8-77.6) and a specificity of 99.4% (95% CI 96.5-99.9), while the Kahn criteria had a sensitivity of 52.3% (95% CI 42.6-61.7) and a specificity of 99.4% (95% CI 96.5-99.9). The sensitivity and specificity of Sharp criteria were 57.7% (95% CI 47.9-66.87) and 90% (95% CI 84.4-93.8), respectively.</p>				<p>PMC ID: PMC7204172 SCOPUS H-INDEX:36 IF: NA</p>
258.	<p>John, K. J., Turaka, V. P., Muruga Bharathy, K., Vignesh Kumar, C., Jayaseelan, L., Visalakshi, J., Nadaraj, A., Mathew, A., Mariam, F., Nellimala, N. J., Joy, A., Punitha, J. V., Koshy, M., Chandu, G., Gunasekaran, K. and Sudarsanam, T. D. Predictors of mortality, strategies to reduce readmission, and economic impact of acute decompensated heart failure: Results of the Vellore Heart Failure Registry Indian Heart Journal; 2020, 72 (1): 20-26</p> <p>Address: Department of Medicine, Christian Medical College, Vellore, India Department of Biostatistics, Christian Medical College, Vellore, India Interventional Cardiology, Division of Cardiology, Mazankowski Alberta Heart Institute, University of Alberta, Canada Christian Medical College, Vellore, India</p> <p>Aim: Heart failure is a global problem that is increasing in prevalence. We undertook the initiative to compile the Vellore Heart Failure Registry (VHFR) to assess the clinical profile, mortality, risk factors and economic burden of heart</p>	INT	JAN TO JUN	Medicine, Biostatistics	<p>SCOPUS H-INDEX:38 IF: 1.770 RESURCHIFY (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	failure by conducting a prospective, observational, hospital-based cohort study in Vellore , Tamil Nadu. Methods and results: This study was a prospective observational cohort study conducted at the Christian Medical College and Hospital, Vellore , between January 2014 and December 2016. A total of 572 patients who satisfied the Boston criteria for "definite heart failure" were included and the primary outcome was all-cause mortality. The median duration of hospital stay was eight days and the in-hospital, one, three and six month mortalities were 13.25%, 27.3%, 32.53% and 38.15%, respectively. The median duration of survival was 921 days. Readmission for heart failure constituted 42%, and the most common cause of decompensation was an infection(31.5%). The presence of cyanosis at admission, history of previous stroke or transient ischemic attack, and American College of Cardiology (ACC)/American Heart Association (AHA) stage D at the time of discharge were independently associated with mortality at six months. The median total direct cost of admission was INR 84,881.00 (\$ 1232.34) Conclusion: The VHFR cohort had younger, more diabetic, and fewer hypertensive subjects than most cohorts. Admission for heart failure is a catastrophic health expenditure. Attempts should be made to ensure a reduction in readmission rates by targeting goal-directed therapy. As the most common cause of acute decompensation is pneumonia, vaccinating all patients before discharge may also help in this regard. © 2020 Cardiological Society of India				
259.	John, K., Mishra, A. K., Gunasekaran, K. and Iyyadurai, R. Amlodipine-Induced Gingival Hyperplasia in a Young Male with Stage 5 Chronic Kidney Disease Case Rep Nephrol; 2020, 2020 7801546 Address: Department of Medicine, Christian Medical College, Vellore , India. Gingival hyperplasia is a rare finding in clinical practice. Nevertheless, when it occurs, it is a finding of great value as it can lead to definite clinical diagnosis. The present case is a 19-year-old male who was referred for further management of stage 5 chronic kidney disease. On evaluation, he was found to have gingival hyperplasia. He was evaluated for reversible causes of kidney disease, and since none were found, renal replacement therapy was advised. He had been taking amlodipine for blood pressure control. As this was presumed to be the cause of gingival hyperplasia, it was stopped and replaced by a combination of beta-blocker and prazosin. At six-month follow-up, he had complete resolution of gingival hyperplasia. Amlodipine as a cause of gingival hyperplasia is a rare occurrence. However, it is crucial to keep in mind such a possible side effect of this commonly prescribed antihypertensive drug. PMC7038384 publication of this article.	INT	JAN TO JUN	Medicine	PMID:32099704 PMC ID: PMC7038384 H-INDEX:NA IF: NA
260.	John, M. J., Chakrabarti, P., Apte, S., Bhattacharyya, M., Chandrakala, S., Hansen, T., Kolla, R., Ross, C., Seth, T., Siddharthan, N. and Abraham, A. Turoctocog alfa is safe for the treatment of Indian patients with hemophilia A: Guardian 10 trial results	INT	JUL TO DEC	Clinical Haematology	SCOPUS

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Res Pract Thromb Haemost; 2020, 4 (8): 1324-1330</p> <p>Address: Department of Clinical Haematology, Haemato-Oncology, & Bone Marrow (Stem Cell) Transplant Unit, Christian Medical College and Hospital, Ludhiana, India</p> <p>Department of Hematology, NRS Medical College, Kolkata, India</p> <p>Department of Hematology and Bone Marrow Transplantation, Sahyadri Specialty Hospital, Pune, India</p> <p>Department of Hematology, Calcutta Medical College, Kolkata, India</p> <p>Department of Haematology, KEM Hospital, Mumbai, India</p> <p>Novo Nordisk A/S, Søborg, Denmark</p> <p>Novo Nordisk India, Bangalore, India</p> <p>St Johns Medical College Hospital, Bangalore, India</p> <p>Department of Haematology, All India Institute of Medical Sciences, New Delhi, India</p> <p>Department of Clinical Haematology, Amrita Institute of Medical Sciences, Kochi, India</p> <p>Department of Hematology, Christian Medical College, Vellore, India</p> <p>Background: Hemophilia A is an X chromosome-linked bleeding disorder caused by the deficiency of coagulation factor VIII (FVIII). The majority of the Indian population with hemophilia A use plasma-derived clotting factors and, in some instances, fresh frozen plasma and cryoprecipitate. Safer and more efficient treatment options are needed for this group of patients. Objectives: To assess the safety of turoctocog alfa, a third-generation recombinant FVIII molecule, for the treatment and prophylaxis of bleeding episodes in previously treated Indian patients with moderate or severe hemophilia A. Patients/Methods: This single-country, multicenter, open-label, nonrandomized trial enrolled 60 patients who received prophylactic treatment with turoctocog alfa for 8 weeks, which corresponded to a minimum of 20 exposure days. Confirmed development of FVIII inhibitors during the 8-week treatment period was evaluated. Other assessments included frequencies of adverse drug reactions (ARs), serious adverse reactions, drug-related allergic reactions, and infusion reactions during the 12-week period after the first treatment; hemostatic effect of turoctocog alfa for the treatment of bleeding episodes; and total annualized dose of turoctocog alfa administered during the 8-week treatment period. Results: No incidence of FVIII inhibitors was detected. No safety concerns such as ARs, serious ARs, or drug-related allergic reactions were noted. The hemostatic success rate for the treatment of bleeding episodes with turoctocog alfa was 81.6%. Conclusions: The trial results demonstrated that turoctocog alfa is a safe treatment option for the prophylaxis and treatment of bleeding episodes in previously treated adolescent and adult patients with hemophilia A in the Indian population. © 2020 The Authors. Research and Practice in Thrombosis and Haemostasis published by Wiley Periodicals LLC on behalf of International Society on Thrombosis and Haemostasis.</p>				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
261.	<p>John, M., Paul, T. V., Joshi, A., Kumar, R., Gupta, P. R., Kumar, S., Nahata, K., Ravindra, B. K. and Mohan, V. Use of Gla-100 in Special Situations The Journal of the Association of Physicians of India; 2020, 68 (12[Special]): 60-66 Address: Senior Consultant Endocrinologist, Providence Endocrine and Diabetes Specialty Center, Trivandrum, Kerala. Professor, Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore, Tamil Nadu. Senior Consultant Endocrinologist, Sudha Hospital and Medical Research Center, Kota, Rajasthan. Consultant Endocrinologist, Endocare Superspeciality Hospital, Nizamabad, Telangana. Consultant, Apollo Clinic, Howrah, West Bengal. Consultant, Department of Internal Medicine, Manipal Hospital, Bangalore, Karnataka. Consultant, Dr. Nahata's Clinic, Guwahati, Assam. Medical Affairs, Diabetes and Cardiovascular, Sanofi India Ltd., Mumbai, Maharashtra. Chairman and Chief Diabetologist, Dr. Mohan's Diabetes Specialities Centre, Chennai, Tamil Nadu.</p> <p>Insulin therapy is the cornerstone of diabetes management in people with type 2 diabetes mellitus (T2DM). Therefore, its use is recommended even in special populations and situations such as the elderly, pregnant women, obese individuals, people observing religious fasting, and in the presence of comorbidities such as renal insufficiency, and cancer. Since these special situations predispose to complications such as a high risk of hypoglycemia, patients need constant glucose monitoring and insulin dose adjustments, wherever applicable. This review discusses the various considerations that might guide the decision-making process in the special situations alluded to here. It also throws light on how insulin glargine 100 U/mL has emerged as a preferred choice of insulin therapy in most of these situations, on the strength of its inherently low hypoglycemia and weight gain potential, which has found traction even in the recent diabetes guidelines.</p>	NAT	JUL TO DEC	Endocrinology, Diabetes and Metabolism	PMID: 33247666
262.	<p>John, R. and Varghese, G. M. Scrub typhus: a reemerging infection Curr Opin Infect Dis; 2020, 33 (5): 365-371 Address: Department of Infectious Diseases, Christian Medical College, Vellore, India.</p> <p>PURPOSE OF REVIEW: Scrub typhus, caused by Orientia tsutsugamushi, is a widely neglected disease which is gaining global momentum because of its resurgence patterns. The disease is now being reported in newer regions as well as areas previously endemic areas. In this review, we aim to comprehensively review the data available to assist physicians in making an accurate diagnosis and appropriate management of the disease. RECENT FINDINGS: Several diagnostic tests have been</p>	INT	JUL TO DEC	Infectious Diseases	PMID: 32868511

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	developed for confirming scrub typhus. However, there is lack of clarity on which tests are most appropriate in a given clinical scenario. A recent study has demonstrated that in early disease (<7 days) when serological tests remain negative, the quantitative polymerase chain reaction is the most sensitive test. Among the serological tests, both IgM enzyme-linked immunosorbent assay as well as rapid diagnostic tests revealed excellent sensitivities and specificities. SUMMARY: With the reemergence of scrub typhus, a high degree of clinical suspicion is required to appropriately diagnose this disease which presents as an acute febrile illness. It can progress to develop various complications leading to multi-organ dysfunction syndrome. Mild illness responds well to antibiotic treatment with doxycycline and azithromycin. Further studies are required to determine the most optimal therapy in severe scrub typhus infections and superiority of one drug over the other.				
263.	John, S. M., Sagar, S., Aparna, J. K., Joy, S. and Mishra, A. K. Risk factors for hypercalcemia in patients with tuberculosis Int J Mycobacteriol; 2020, 9 (1): 7-11 Address: Department of Internal Medicine, Christian Medical College, Vellore, Tamil Nadu, India. BACKGROUND: Tuberculosis (TB) is prevalent worldwide and causes significant morbidity and mortality. TB is known to cause hypercalcemia. We aimed to assess the prevalence and risk factors for developing hypercalcemia among patients with TB. METHODS: In this retrospective case-control study, patients with microbiological evidence of TB and an available serum calcium value were included between 2005 and 2016. The demographic, clinical, and laboratory details were recorded. Various risk factors were compared in TB patients with and without hypercalcemia. RESULTS: A total of 129 patients fulfilled the inclusion criteria. Twenty percent were found to have an elevated serum calcium level, 65% of them had clinical features of hypercalcemia. In comparison, the odds of developing hypercalcemia in the presence of disseminated TB, diabetes and renal failure was 1.83, 1.60, and 7.33, respectively. CONCLUSION: One-fifth of patients with TB have hypercalcemia. Risk factors of the same are renal failure, diabetes, and disseminated TB.	INT	JAN TO JUN	Internal Medicine	PMID:32474481 SCOPUS H-INDEX:16 IF: 0.820 RG (2018/2019)
264.	John, T. J. Will Coronavirus Pandemic eventually evolve as Pan-endemic? Current Science; 2020, 118 (6): 855-856 Address: [John, T. Jacob] Christian Med Coll & Hosp, Clin Virol, Vellore 632004, Tamil Nadu, India. tjacobjohn@yahoo.co.in	NAT	JAN TO JUN	Clinical Virology	WOS:000522560600001 SCOPUS H-INDEX:110 IF: 0.756 BIOXBIO (2018/2019)
265.	John, T. J. How prepared is India to control the COVID-19 pandemic? Economic and Political Weekly; 2020, 55 (11): 13-15	NAT	JAN TO JUN	Clinical Virology	SCOPUS H-INDEX:48 IF: 0.310 RESURCHIFY

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Address: Department of Clinical Virology, Christian Medical College, Vellore, India</p> <p>The SARS-CoV-2 infection, COVID-19, has reached many places in India, from Kerala to Kashmir. With local spread occurring from infection seeded by importations, a nationwide epidemic of unprecedented seriousness is imminent. The Prime Minister should assume leadership immediately and a full-time war-room, run by a task force with the best national experts, must be set up, and immediate, medium- and long-term strategies designed and implemented. We have lost one month already. © 2020 Economic and Political Weekly. All rights reserved.</p>				(2018/2019)
266.	<p>John, T. J. and Dharmapalan, D. Prepare for Post-COVID-Pandemic Polio Problems Indian Pediatr; 2020, 57 (6): 591</p> <p>Address: Christian Medical College, Vellore, Tamil Nadu, India. Apollo Hospitals, CBD Belapur, Navi Mumbai , India. drdhanyaroshan@gmail.com .</p>	NAT	JAN TO JUN	Clinical Virology	<p>PMID:32393679 SCOPUS H-INDEX:49 IF: 1.163 BIOXBIO (2018/2019)</p>
267.	<p>John, T. J., Das, M. and Sarkar, A. Litchi is safe and harmless in normal individuals Current Science; 2020, 118 (8): 1152-1152</p> <p>Address: [John, T. Jacob] Christian Med Coll & Hosp, Clin Virol, Vellore 632004, Tamil Nadu, India. [Das, Mukul] CSIR Indian Inst Toxicol Res, MG Marg, Lucknow 226001, Uttar Pradesh, India. [Sarkar, Abhirup] All India Inst Med Sci, Dept Lab Med, New Delhi 110029, India. Das, M (reprint author), CSIR Indian Inst Toxicol Res, MG Marg, Lucknow 226001, Uttar Pradesh, India. mditrc@rediffmail.com</p>	NAT	JAN TO JUN	Clinical Virology	<p>WOS:000528777100004 SCOPUS H-INDEX:110 IF: 0.756 BIOXBIO (2018/2019)</p>
268.	<p>Johnson, J. T., Cherian, K. E., Kapoor, N. and Paul, T. V. Micturition syncope secondary to urinary bladder paraganglioma BMJ Case Rep; 2020, 13 (3):</p> <p>Address: Endocrinology, Christian Medical College, Vellore, Tamil Nadu, India. Endocrinology, Christian Medical College, Vellore, Tamil Nadu, India thomasvpaul@yahoo.com.</p> <p>Paraganglioma of the bladder is a rare tumour accounting for less than 0.06% of all urinary bladder tumours and has varied presentations. It may present with clinical symptoms of pheochromocytoma, may be non-functioning and asymptomatic or may present with haematuria. Hence, paragangliomas are occasionally misdiagnosed, and this results in unanticipated intraoperative hypertensive crisis. We present the case of a 44-year-old woman with urinary bladder paraganglioma who presented with young onset hypertension, recurrent micturition syncope with prior history of coronary artery disease and stroke. She was stabilised preoperatively with alpha blocking agents and subsequently underwent successful</p>	INT	JAN TO JUN	Endocrinology	<p>PMID:32169989 PMC ID: PMC7069265 H-INDEX:22 IF: 0.440 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	transurethral resection of the same.				
269.	<p>Johnson, J. T., Paul, J., Cherian, K. E., Kapoor, N., Asha, H. S. and Paul, T. V. Familial hypercholesterolemia: The skin speaks J Family Med Prim Care; 2020, 9 (8): 4451-4453 Address: Department of Endocrinology, Diabetes and Metabolism, Christian Medical College and Hospital, Vellore, Tamil Nadu, India.</p> <p>Familial hypercholesterolaemia (FH) is an autosomal dominant inherited disorder of lipoprotein metabolism caused by defects in the low-density lipoprotein receptor (LDLR) gene. It is characterized by high low-density lipoprotein (LDL) cholesterol levels, premature cardiovascular disease (CVD), and tendon xanthomas. We present the case of a 26-year-old gentleman who presented with multiple nodular eruptions over the extensor aspects of upper and lower limbs and was diagnosed as FH on the basis of positive family history, typical lipid profile abnormalities, and biopsy of the nodule consistent with tendon xanthomas. The diagnosis and management of this case is deftly feasible at the primary care level.</p>	NAT	JUL TO DEC	Endocrinology, Diabetes and Metabolism	<p>PMID: 33110883 PMC:7586528</p>
270.	<p>Johri, R., Peter, J., Peravali, V., Sandhya, P., Danda, D. and David, S. Diagnostic performance of dry eye tests, serology and labial salivary gland biopsy in primary Sjogren's syndrome in an Indian setting Clinical Epidemiology and Global Health; 2020, 8 (1): 301-304</p> <p>Address: Department of Ophthalmology, Christian Medical College, Vellore, India Department of Biostatistics, Christian Medical College, Vellore, India Department of Immunology and Rheumatology, Christian Medical College, Vellore, India</p> <p>Purpose: To evaluate the diagnostic performance of dry eye tests, serology and labial salivary gland biopsy in Primary Sjogren's syndrome (pSS). Methods: Prospective cross-sectional study spanning 7-months of patients referred from rheumatology for evaluation of dry eyes. Severity of ocular symptoms was assessed using the Ocular Surface Disease Index (OSDI) questionnaire. The sensitivity, specificity and positive likelihood ratio (+LR) of Schirmer-I (Sch-I) test, Tear Break-up time (TBUT) and Ocular Staining Score (OSS) were assessed and Receiver Operating characteristic (ROC) curves were analysed. The American College of Rheumatology (ACR) criteria was used to diagnose pSS. Results: Of the 95 patients, 31 (32.6%) fulfilled the ACR criteria for pSS. OSDI score was significantly ($p < 0.001$) higher (24.6 ± 9.4) in pSS than non-pSS (17.8 ± 5.4) patients. The sensitivity and specificity were 3.2% and 100% for Sch-I ≤ 5 mm and 61.3% and 90.6% for OSS ≥ 3 respectively. TBUT of <10 s had poor specificity (12.5%); however at lower threshold (<8 s), sensitivity (80.6%) and specificity (60.9%) were optimal. The +LR was 2.07 for TBUT <8 s and 6.54 for OSS ≥ 3. Twenty-six (83.9%) patients diagnosed as pSS had anti-SSA or anti-SSB antibodies. Anti-SSA, when compared with anti-SSB, had better sensitivity (76.7% vs. 52.4%) than specificity (88.7% vs.</p>	INT	JAN TO JUN	Ophthalmology, Biostatistics, Clinical Immunology and Rheumatology	<p>SCOPUS H-INDEX:8 IF: 0.520 RESURCHIFY (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	100%). Labial biopsy had the best diagnostic performance (sensitivity 96.8%; specificity 88.9%; +LR 8.71). Conclusion: In patients with high OSDI scores, dry eye tests in combination with serology will identify the subset of patients with a high probability of pSS. Labial biopsy may be considered in patients with negative serology. © 2019				
271.	<p>Jose, A., Binu, A. J., Cherian, K. E., Kapoor, N., Asha, H. S. and Paul, T. V. Vitamin D assessment and precision of clinical referrals: Insights gained from a teaching hospital in southern India J Postgrad Med; 2020, 66 (4): 194-199 Address: Department of Clinical Biochemistry, Christian Medical College and Hospital, Vellore, India. Internal Medicine, Christian Medical College and Hospital, Vellore, India. Endocrinology, Christian Medical College and Hospital, Vellore, India. OBJECTIVE: Vitamin D deficiency is widely prevalent worldwide. This has led to a significant surge in referrals for vitamin D assessment in recent years. The cost-effectiveness and rationalization of this practice is uncertain. This study aimed to evaluate the referral pattern for vitamin D testing from a tertiary center in southern India. MATERIALS AND METHODS: This was a cross-sectional study done over a period of one year (2017). A total of 95,750 individuals, referred for vitamin D screening were included in this study. Details regarding referring departments and indications for referral were obtained from the computerized hospital information processing system (CHIPS). RESULTS: The study population exhibited a female preponderance (54.1%) with mean (SD) age of 40.3 (18.5) years. Overall, 44% were found to have vitamin D deficiency. Most of the referrals were from nephrology (15.4%), neurology (10.1%), and orthopedics (9.1%). Nevertheless, dermatology, the staff-clinic, and hematology which contributed to 3.3%, 1.7%, and 1.7% of referrals, had a higher proportion of vitamin D deficiency of 59.1%, 57.7%, and 64.6%, respectively. Although the most common indications for referral were generalized body aches (20.5%) and degenerative bone disorders (20.1%), the proportion of subjects with vitamin D deficiency referred for these indications were 46.1% and 41.6%, respectively. In contrast, chronic steroid use that accounted for 3.3% of the referrals had 59.1% of subjects who were deficient in vitamin D. CONCLUSION: To ensure a rational approach to vitamin D testing, clinicians ought to use their discretion to screen those truly at risk for vitamin D deficiency on a case to case basis and avoid indiscriminate testing of the same.</p>	NAT	JUL TO DEC	Clinical Biochemistry, Internal Medicine, Endocrinology	PMID:33037169 PMC ID:7819383
272.	<p>Joseph, Aneesh, Saravana Kumar, Velusamy and Tharion, Elizabeth Cardiac autonomic activity, physical fitness, and arterial blood pressure of Kungfu practitioners Translational Sports Medicine; 2020, 3 (5): 447-453 Address: Department of Physiology, Christian Medical College, Vellore, India, Department of Biostatistics, Christian Medical College, Vellore, India Correspondence: Elizabeth Tharion, Department of Physiology, Christian Medical College,</p>	INT	JUL TO DEC	Physiology, Biostatistics	PMC

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Vellore, Tamil Nadu 632002, India. Email: e.tharion@cmcvellore.ac.in Present address: Aneesh Joseph, Government Medical College, Kollam, India Velusamy Saravana Kumar, ICMR –National Institute of Epidemiology, Chennai, India</p> <p>Abstract: Kungfu practice that provides aerobic and anaerobic exercise routines along with breathing exercise and meditation is not typically prescribed as exercise therapy. Lack of evidence to support Kungfu training as being comparable to other exercise regimens contributes to this situation. We compared the cardiovascular autonomic control and physical fitness estimates of 20 Kungfu practitioners with 20 subjects matched for age, BMI, and physical activity levels who regularly participated in other recreational sports. We found that there was no significant difference between the resting heart rate, resting short-term heart rate variability parameters, standard cardiac autonomic function test indices, and the heart rate recovery parameters between the Kungfu group and the Sports groups. Neither was there any difference in the indirect measures of fitness between the two groups. However, the resting mean arterial pressure in the Kungfu group (81.5 ± 5.0 mm Hg) was significantly lower than that in the Sports group (85.0 ± 5.0 mm Hg) ($P = .031$). Kungfu practitioners had similar cardiovascular autonomic parameters and indirect measures of physical fitness, but lower resting mean arterial pressure, than practitioners of other forms of sporting activities. The causality and temporality of factors studied need future investigations, given the unique nature of Kungfu training, and for its clinical therapy applications.</p>				
273.	<p>Joseph, C. M., Jepeganandam, T. S., Ramasamy, B., Cherian, V. M., Nithyananth, M., Sudarsanam, T. D. and Premkumar, P. S. Time to debridement in open high-grade lower limb fractures and its effect on union and infections: A prospective study in a tropical setting J Orthop Surg (Hong Kong); 2020, 28 (1): 2309499020907558</p> <p>Address: Department of Orthopaedics, Christian Medical College, Ida Scudder Road, Vellore, Tamil Nadu, India. Department of Medicine Unit 2, Christian Medical College, Ida Scudder Road, Vellore, Tamil Nadu, India. Department of Biostatistics and Wellcome Trust Research Laboratory, Christian Medical College, Ida Scudder Road, Vellore, Tamil Nadu, India.</p> <p>PURPOSE: To prospectively evaluate whether time to debridement has any correlation with union, infection, and quality of life in high-grade lower limb fractures in a tropical setting. METHODS: A prospective cohort study was conducted at a tertiary care center in South India. Two hundred fifty-four adult skeletally mature patients with 301 grade 3 fractures involving the femur, tibia, or fibula were recruited. The cohort was empirically divided into two groups (early and late) based on the time to debridement (less than or more than 12 h from</p>	INT	JAN TO JUN	Orthopaedics, Medicine Unit II, Biostatistics	<p>PMID:32186234 WOS:000524335700001 SCOPUS H-INDEX:38 IF: 0.550 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	injury). OUTCOME: The primary outcome was nonunion. Secondary outcomes were deep infection rates and patients' quality of life. Short form-36 (SF-36) and short musculoskeletal functional assessment (SMFA) questionnaires were also used. Patients were followed up for 9 months. RESULTS: The follow-up rate was 93%. The late group had a significantly higher risk of nonunion (odds ratio(OR): 6.5, 95% confidence interval (CI): 2.82-14.95) and infections (OR: 6.05, 95% CI: 2.85-12.82). There was a 4% increase in the infection risk for each hour of delay for the initial 50 h (p < 0.0001). SF-36 and SMFA scores were superior in the early group (p < 0.0001). CONCLUSION: The study contradicts findings reported in the literature from the West. Our study was in agreement with our hypothesis and proved that debridement within 12 h resulted in significantly lower rates of nonunion and infections and an overall improved quality of life in high-grade open lower limb fractures in a developing country. LEVEL OF EVIDENCE: Level II. TRIAL REGISTRATION: German Clinical Trials Register DRKS00015186.				
274.	Joseph, G., Kota, A., Thomson, V. S., Perla, H. T. and Keshava, S. N. Endografts with mini-cuff-augmented fenestrations for endovascular repair of thoracoabdominal aortic and common iliac artery aneurysms Vascular; 2020, 1708538120949324 Address: Department of Cardiology, Christian Medical College, Vellore, India. Department of Vascular Surgery, Christian Medical College, Vellore, India. Department of Radiology, Christian Medical College, Vellore, India. OBJECTIVE: To report a technique of creating mini-cuff-augmented fenestrations in endografts for use in endovascular aneurysm repair. METHODS: Circular fenestrations are made in Dacron thoracic (Valiant Captivia, Medtronic) or tapered iliac limb (Endurant, Medtronic) endografts using thermal cautery and the edges are strengthened with radio-opaque wire sutured on with 6-0 polypropylene. Straight thin-wall expanded polytetrafluoroethylene vascular graft of the same diameter as the fenestration is affixed to its edge with nonlocking 5-0 polypropylene suture, everted, trimmed, balloon-dilated to its nominal diameter and prevented from invaginating by relaxed external stay sutures. Mini-cuff-augmented fenestrations are often pre-cannulated with looped or externalized nitinol guidewires to facilitate catheter crossing. Successful use of mini-cuff-augmented fenestrations is illustrated in a symptomatic patient with Crawford extent-3 thoracoabdominal aortic and bilateral common iliac artery aneurysm undergoing endovascular repair. Seven mini-cuff-augmented fenestrations were created to preserve flow into five visceral arteries (celiac, superior mesenteric, left and dual right renal; all arising from the aneurysm) and both internal iliac arteries (arising at the aneurysm edge). RESULTS: Effective sealing was achieved immediately at all mini-cuff-augmented fenestrations. At 6-month follow-up there were no endoleaks, all fenestration stents were patent and undistorted, and the aneurysm sac size had decreased. CONCLUSION: Mini-cuff-augmented fenestrations accomplish effective fenestration sealing, despite being in aneurysmal zones, while preserving the advantages of fenestrations over cuffed	INT	JUL TO DEC	Cardiology, Vascular Surgery, Radiology	PMID: 32807029

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	branches.				
275.	<p>Joseph, G., Pillai, R., Shukla, V., Babu, K. S., Manickam, S., Thomson, V. S., Kuruvilla, K. T., Thankachen, R., Joseph, E. and Sahajanandan, R. Cerebral Protection Using Percutaneous Normothermic Bilateral Antegrade Cerebral Perfusion During Total Arch TEVAR in a Patient With Shaggy Aorta J Endovasc Ther; 2020, 27 (3): 405-413</p> <p>Address: Department of Cardiology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Anesthesiology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Cardiothoracic Surgery, Christian Medical College, Vellore, Tamil Nadu, India. Department of Neurophysiology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Radiology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Purpose: To report a technique of global cerebral embolic protection (CEP) designed for use during thoracic endovascular aortic repair (TEVAR). Technique: Arterial cannulas are inserted percutaneously in the right axillary artery (12-F) and left common carotid artery (LCCA; 10-F) to provide normothermic antegrade cerebral perfusion during TEVAR with neuromonitoring. Inferior vena cava blood is drawn using a 19-F femoral cannula, filtered, oxygenated, and delivered through independent roller pumps to the arterial cannulas. Static CEP is obtained by balloon occlusion of the 3 aortic arch branches proximally, resulting in complete separation of aortic and cerebral blood flow; static CEP is used during aortic endograft delivery and deployment. Dynamic CEP, obtained by creating flow reversal in the innominate artery and proximal LCCA, is used at all other times. Successful use of this CEP technique is illustrated in a patient with shaggy aorta undergoing fenestrated total arch TEVAR. Conclusion: Percutaneous normothermic bilateral antegrade cerebral perfusion provides effective CEP during TEVAR.</p>	INT	JAN TO JUN	Cardiology, Anaesthesiology, Cardiothoracic Surgery, Neurophysiology, Radiology	<p>PMID:32321357 WOS:000529392600001 SCOPUS H-INDEX:98 IF: 2.986 BIOXBIO (2018/2019)</p>
276.	<p>Joseph, G., Thomson, V. S. and Kota, A. Rapid Ventricular Pacing During Endograft Deployment in the Arch and Ascending Aorta: A Simple, Reliable, and Safe Technique Using a Stabilising Buddy Wire System Eur J Vasc Endovasc Surg; 2020, Address: Department of Cardiology, Christian Medical College, Vellore, Tamil Nadu, India. Electronic Address: joseph59@gmail.com. Department of Cardiology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Vascular Surgery, Christian Medical College Vellore, Vellore, Tamil Nadu, India.</p>	INT	JUL TO DEC	Cardiology, Vascular Surgery	PMID: 33272810
277.	<p>Joseph, M. M., Benjamin, R., Padmanabhan, A., Bal, D. and Nair, S. Successful Management of a Life-threatening Endotracheal Bleed with</p>	NAT	JAN TO JUN	Neurological Sciences, Radiology	<p>PMID:32435104 PMC ID: PMC7225765</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Angiographic Stenting Indian J Crit Care Med; 2020, 24 (3): 210-211</p> <p>Address: Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, India. Department of Radiology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Several operative and postoperative complications have been reported after tracheostomy, including fatal hemorrhage from erosion of a major vessel. We present here a case of hemorrhage after a surgical tracheostomy. This case is being reported on account of the unusual etiology of the hemorrhage and associated high fatality rates. All concerned need to be aware of this complication and its emergency management. How to cite this article: Joseph MM, Benjamin R, Padmanabhan A, Bal D, Nair S. Successful Management of a Life-threatening Endotracheal Bleed with Angiographic Stenting. Indian J Crit Care Med 2020;24(3):210-211.</p>				H-INDEX:27 0.590 RG (2018/2019)
278.	<p>Joseph, R. G., Kallivayalil, R. A. and Rajeev, A. Pathways to care in children- perspectives from a child guidance clinic in South India Asian Journal of Psychiatry; 2020, 54 Address: [Joseph, Rachna George; Kallivayalil, Roy Abraham; Rajeev, A.] Pushpagiri Inst Med Sci & Res Ctr, Dept Psychiat, Thiruvalla, Kerala, India. [Joseph, Rachna George] Christian Med Coll Vellore, Dept Psychiat, Vellore, Tamil Nadu, India. [Rajeev, A.] All India Inst Med Sci, Dept Community & Family Med, Mangalagiri, India. [Joseph, Rachna George] Cumberland Hosp, New South Wales Dept Hlth, Sydney, NSW, Australia. Joseph, RG (corresponding author), Christian Med Coll & Hosp, Dept Psychiat, Vellore, Tamil Nadu, India. rachna.george@cmcvellore.ac.in Purpose: In India the pathways to care in children with mental health problems remain relatively unexplored. Investigating the factors that drive the pathway will help determine interventions and also draft policies for a streamlined Child and adolescent mental health service. Method: Children who attended the Child Guidance Clinic sampled by WHO Pathways Encounter questionnaire. Statistical tests applied to find key influencers like gatekeepers, intermediate points of care, symptoms initiating referral, duration of untreated illness, time to arrive at appropriate care and primary diagnosis. Results: The most common diagnostic category was externalizing disorder 51(37.5 %). The gatekeepers identified were 111(81.6 %) Parents/Relatives/Guardians and teachers 25 (18.3 %). Academic concerns identified by teachers took a mean of 72 months (30.271) to arrive at appropriate care versus 50.4 months (23.18) when identified by Parents/Relatives/Guardians group. Significant delays were observed with Neurodevelopmental disorders arriving to care with delays up to 130.2 (70.11) months (p < 0.001) and having 64.2 (33.7) months (p < 0.001) duration of untreated illness. Externalizing disorders took a duration of 94.08 (54.17) months</p>	INT	JUL TO DEC	Psychiatry	WOS:000595921200084

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	(p < 0.001) to arrive to appropriate care and had 54.2 (36.33) months (p < 0.001) duration of untreated illness. Teachers took longer time in detecting the indicators and this caused duration of untreated illness of 73.44 (36.05) months (p < 0.001) and a delay of 128.08 (71.23) months (p < 0.001) to arrive to appropriate care. Conclusions: The pathways to care in children are characterized by long duration of untreated illness and undue time to care. Gatekeepers like teachers and intermediary points of care were associated with inadvertent delays along the pathway.				
279.	<p>Joseph, T., Karuppusami, R., Karthikeyan, M., Kunjummen, A. T. and Kamath, M. S. Effect of paternal age on treatment outcomes in couples undergoing assisted reproductive technology for non-male factor infertility: a retrospective analysis of 809 cycles Middle East Fertility Society Journal; 2020, 25 (1): Address: Department of Reproductive Medicine, Christian Medical College, Vellore, 632004, India Department of Biostatistics, Christian Medical College, Vellore, 695002, India</p> <p>Background: Worldwide, there is an increase in uptake of assisted reproductive technology (ART) treatment. The impact of paternal age on ART outcomes is unclear. In view of the conflicting results reported by studies evaluating effect of paternal age on ART outcomes, we planned a study to investigate the impact of advanced paternal age in couples undergoing ART for non-male factor infertility. We conducted a retrospective cohort study at a university-level teaching hospital in South India. All couples who underwent ART for non-male factor infertility were included. The couples were divided into two groups based on the age of the male partner. Group I included couples with male partner's age less than 40 years, taken as reference group. Group II included couples with male partners age more than or equal to 40 years. The primary outcome was live birth rate. Secondary outcomes included clinical pregnancy, miscarriage, fertilization, embryo development, and blastulation rates. Results: A total of 809 cycles were included for the study. Following exclusion of 39 cycles, 770 cycles were analyzed for outcomes. Group I comprised of 556 (72%) cycles and group II comprised of 214 (28%) cycles. There was no significant difference in live birth rate per embryo transfer between groups I and II (31.8% vs. 29.4%; odds ratio, OR, 0.89; 95% CI 0.63 to 1.26). After adjustment for potential confounders, the live birth rate did not differ significantly (adjusted odds ratio, aOR, 1.10; 95% CI 0.74 to 1.65). The clinical pregnancy (39.4% vs. 36%; aOR 1.06; 95% CI 0.72 to 1.56) and the miscarriage rates (18.3% vs. 15.6%; aOR 0.73; 95% CI 0.32 to 1.66) were also similar between the two groups. There was significant decrease in the blastulation rate (36.8% vs. 32.1%; P 0.002) in the advanced paternal age group as compared to the reference group. Conclusion: The current study suggests that in couples undergoing ART for non-male factor, there is no detrimental effect of increasing paternal age on treatment outcomes. © 2020, The Author(s).</p>	INT	JAN TO JUN	Reproductive Medicine, Biostatistics	SCOPUS H-INDEX:16 IF: NA

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
280.	<p>Joseph, T., Mascarenhas, M., Karuppusami, R., Karthikeyan, M., Kunjummen, A. T. and Kamath, M. S.</p> <p>Antioxidant pretreatment for male partner before ART for male factor subfertility: a randomized controlled trial</p> <p>Hum Reprod Open; 2020, 2020 (4): hoaa050</p> <p>Address: Department of Reproductive Medicine, Christian Medical College, Vellore, India.</p> <p>Glasgow Centre for Reproductive Medicine, Glasgow, UK.</p> <p>Department of Biostatistics, Christian Medical College, Vellore, India.</p> <p>STUDY QUESTION: Does oral antioxidant pretreatment for the male partner improve clinical pregnancy rate in couples undergoing ART for male factor subfertility? SUMMARY ANSWER: There was no significant difference in clinical pregnancy rate following oral antioxidant pretreatment for male partner in couples undergoing ART for male factor subfertility compared to no pretreatment. WHAT IS KNOWN ALREADY: Damage to sperm mediated by reactive oxygen species (ROS) contributes significantly to male factor infertility. The ROS-related injury reduces fertilization potential and adversely affects the sperm DNA integrity. Antioxidants act as free radical scavengers to protect spermatozoa against ROS induced damage. During ART, use of sperms which have been exposed to ROS-mediated damage may affect the treatment outcome. Pretreatment with antioxidants may reduce the ROS-mediated sperm DNA damage. Currently, antioxidants are commonly prescribed to men who require ART for male factor subfertility but there is ambiguity regarding their role. STUDY DESIGN SIZE DURATION: This was an open label, randomized controlled trial conducted at a tertiary level infertility clinic between February 2013 and October 2019. The trial included 200 subfertile couples who were undergoing ART treatment for male factor subfertility. PARTICIPANTS/MATERIALS SETTING METHODS: Couples were randomized into treatment arm (n = 100) and control arm (n = 100). In the treatment arm, the male partner received oral antioxidants (Vitamin C, Vitamin E and Zinc) for 3 months just prior to the ART cycle. In the control arm, no antioxidant was given to the male partner. The primary outcome was clinical pregnancy rate, while live birth rate (LBR), miscarriage rate and changes in semen parameters were the secondary outcomes. MAIN RESULTS AND THE ROLE OF CHANCE: Out of 200 women randomized, 135 underwent embryo transfer as per protocol. Following intention to treat analysis, no significant difference was noted in clinical pregnancy (36/100, 36% vs 26/100, 26%; odds ratio (OR) 1.60, 95% CI 0.87 to 2.93) and LBR (25/100, 25% vs 22/100, 22%; OR 1.18, 95% CI 0.61 to 2.27) between antioxidant and no pretreatment arms. The clinical pregnancy rate per embryo transfer was significantly higher following antioxidant pretreatment (35/64, 54.7% vs 26/71, 36.6%; OR 2.09, 95% CI 1.05 to 4.16) compared to no pretreatment. There was no significant difference in LBR per embryo transfer (25/64, 39.1%, vs 22/71, 31.0%; OR 1.43, 95% CI 0.70 to 2.91) after antioxidant pretreatment versus no pretreatment. The semen parameters of sperm concentration (median, interquartile range, IQR) (18.2, 8.6 to 37.5 vs 20.5, 8.0 to 52.5, million/ml; P = 0.97),</p>	INT	JUL TO DEC	Reproductive Medicine, Biostatistics	PMID: 33225077 PMC:7668397

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>motility (median, IQR) (34, 20 to 45 vs 31, 18 to 45%; P = 0.38) and morphology (mean ± SD) (2.0 ± 1.4 vs 2.2 ± 1.5%; P = 0.69) did not show any significant improvement after intake of antioxidant compared to no treatment, respectively. LIMITATIONS REASONS FOR CAUTION: The objective assessment of sperm DNA damage was not carried out before and after the antioxidant pretreatment. Since the clinicians were aware of the group allotment, performance bias cannot be ruled out. WIDER IMPLICATIONS OF THE FINDINGS: The current study did not show any significant difference in clinical pregnancy and LBR following antioxidant pretreatment for the male partner in couples undergoing ART for male subfertility. The findings need further validation in a larger placebo-controlled randomized trial. STUDY FUNDING/COMPETING INTERESTS: This trial has been funded by Fluid Research grant of Christian Medical College, Vellore (internal funding). The authors have no conflicts of interest to declare. TRIAL REGISTRATION NUMBER: CTRI/2013/02/003431. TRIAL REGISTRATION DATE: 26 February 2013. DATE OF FIRST PATIENT'S ENROLMENT: 11 February 2013.</p>				
281.	<p>Joshi, A., Kumar, M., Rebekah, G. and Santhanam, S. Etiology, clinical profile and outcome of neonatal pneumothorax in tertiary care center in South India: 13 years experience J Matern Fetal Neonatal Med; 2020, 1-5</p> <p>Address: [Joshi, Avadhesh; Kumar, Manish; Rebekah, Grace; Santhanam, Sridhar] Christian Med Coll & Hosp, Vellore 632004, Tamil Nadu, India. Kumar, M (reprint author), Christian Med Coll & Hosp, Vellore 632004, Tamil Nadu, India. maneeshdr@gmail.com</p> <p>Background: Pneumothorax is a medical emergency and is associated with a significant increase in morbidity and mortality in newborns. It may lead to acute respiratory failure, systemic hypoperfusion, intraventricular hemorrhage (IVH), and death. There is a paucity of data from developing countries about the epidemiology of pneumothorax. Objective: This descriptive study was planned to study the clinical and epidemiological profile of hospitalized neonates with pneumothorax. Material and methods: In this retrospective study neonates admitted to Neonatal Intensive Care Unit (NICU) from 1 January 2004 to 31 December 2016 were reviewed. Relevant statistical analyses were done. Results: There were 144,166 live births and 189 inborn cases of pneumothorax; hence, the incidence was 1.3 per 1000 live births. Males outnumbered females by a ratio of 2:1. 50.1% of affected neonates were preterm, mean gestational age being 35.2 ± 3.9 weeks. The mean birth weight was 2238 ± 794 g. Overall median age at diagnosis was 21 h (IQR: 4-48 h), longer in preterm neonates compared to term. Hyaline membrane disease (HMD) was the most common underlying pulmonary disorder. Pneumothorax was drained in 89.2% of tension and only 16.3% of nontension pneumothoraces. Approximately 20% of the neonates were treated with needle aspiration alone and about 24% were treated conservatively. Mortality</p>	INT	JAN TO JUN	Neonatology	PMID:32075452 WOS:000514947000001 SCOPUS H-INDEX:75 IF: 1.569 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	rate among neonates with pneumothorax was 21.6%. Statistically significant risk factors for mortality were very low birth weight (VLBW) (OR: 2.47, 1.31-4.68), tension pneumothorax (OR: 2.79, 1.05-7.4), and pulmonary hypoplasia (OR: 7.5, 2.8-20.2). Multiple attempts of needle drainage were needed in 2.5% of the cases. The neonates, both term and preterm, requiring drainage had longer duration of hospital stay when compared to those without requirement of drainage. Conclusion: We propose a trial of needle aspiration prior to ICD insertion and intubation which will prevent the complications related to intubation.				
282.	Joy, A. K., Philip, A., Mathews, S. S. and Albert, R. R. A. Transnasal Flexible Laryngoscopy Using Different Topical Preparations and Methods of Application-A Randomized Study J Voice; 2020, Address: Department of ENT, Christian Medical College, Vellore , Tamil Nadu, India; Christian Fellowship Hospital, Oddanchatram, Tamil Nadu, India. Department of ENT, Christian Medical College, Vellore , Tamil Nadu, India. Department of ENT, Christian Medical College, Vellore , Tamil Nadu, India. Electronic Address: sumasusanm@yahoo.co.in. BACKGROUND: The field of laryngology has grown exponentially since the advent of the transnasal flexible laryngoscopy. Flexible laryngoscopy when performed skillfully using the proper technique, facilitates a good view of the hidden areas of the larynx. OBJECTIVE: To compare the effectiveness of the topical agents in providing a more comfortable experience for the patient, allowing the practitioner to advance the endoscope with less friction, pain and discomfort for the patient using 10% lidocaine spray, 2% lidocaine gel, 4% lidocaine with xylometazoline (1:1) soaked pledgets, or aqueous gel. MATERIALS AND METHODS: A prospective randomized single-blinded clinical trial was conducted in a tertiary care teaching hospital in South India where 376 patients were recruited and allocated into four groups based on the topical preparation used. Following endoscopy, each subject filled a questionnaire grading their experience on a visual analogue scale. The clinician also then answered a questionnaire on aspects of the endoscopy performed. RESULTS: The pain score and the ease of performing the procedure among the different groups were comparable. Those in the 10% lidocaine arm experienced significant burning sensation (P = 0.0001). The other variables such as throat pain (P = 0.783), gag reflex (P = 0.318), unpleasant taste (P = 0.092), globus (P = 0.190), swallowing difficulty after the procedure (P = 0.273), difficulty in breathing (P = 0.744) and willingness to have a repeat procedure (P = 0.883) were also comparable. CONCLUSION: Aqueous gel can be used topically during a flexible nasopharyngolaryngoscopy instead of an anesthetic agent alone or one combined with a nasal decongestant.	INT	JUL TO DEC	ENT	PMID: 33092947
283.	Joy, P., Yoganathan, S., Korula, S., Abraham, S. S. C., Barney, A. M., Walter, V. M., Gibikote, S. and Danda, S. Ghosal hematodiaphyseal dysplasia and response to corticosteroid therapy Am J Med Genet A; 2020, Address: Department of Clinical Genetics, Christian	INT	JUL TO DEC	Clinical Genetics, Neurological Sciences, Pediatric Endocrinology, Pediatric Orthopedics, Radiology	PMID: 33185009

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Medical College, Vellore, Tamil Nadu, India. Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, India. Department of Pediatric Endocrinology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Pediatric Orthopedics, Christian Medical College, Vellore, Tamil Nadu, India. Department of Radiology, Christian Medical College, Vellore, Tamil Nadu, India.</p>				
284.	<p>Kabeerdoss, J. and Danda, D. Understanding immunopathological fallout of human coronavirus infections including COVID-19: Will they cross the path of rheumatologists? Int J Rheum Dis; 2020, 23 (8): 998-1008 Address: Department of Clinical Immunology and Rheumatology, Christian Medical College, Vellore, India.</p> <p>Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection causing coronavirus disease 2019 (COVID-19) is the biggest pandemic of our lifetime to date. No effective treatment is yet in sight for this catastrophic illness. Several antiviral agents and vaccines are in clinical trials, and drug repurposings as immediate and alternative choices are also under consideration. Immunomodulatory agents like hydroxychloroquine (HCQ) as well as biological disease-modifying anti-rheumatic drugs (bDMARDs) such as tocilizumab and anakinra received worldwide attention for treatment of critical patients with COVID-19. This is of interest to rheumatologists, who are well versed with rational use of these agents. This brief review addresses the understandings of some of the common immunopathogenetic mechanisms in the context of autoimmune rheumatic diseases like systemic lupus erythematosus (SLE) and COVID-19. Apart from demographic comparisons, the role of type I interferons (IFN), presence of antiphospholipid antibodies and finally mechanism of action of HCQ in both the scenarios are discussed here. High risks for fatal disease in COVID-19 include older age, metabolic syndrome, male gender, and individuals who develop delayed type I IFN response. HCQ acts by different mechanisms including prevention of cellular entry of SARS-CoV-2 and inhibition of type I IFN signaling. Recent controversies regarding efficacy of HCQ in management of COVID-19 warrant more studies in that direction. Autoantibodies were also reported in severe acute respiratory syndrome (SARS) as well as in COVID-19. Rheumatologists need to wait and see whether SARS-CoV-2 infection triggers development of autoimmunity in patients with COVID-19 infection in the long run.</p>	INT	JUL TO DEC	Clinical Immunology and Rheumatology	<p>PMID: 32779341 PMC:7436450</p>
285.	<p>Kachroo, U. and Vinod, E. Comparative analysis of gene expression between articular cartilage-derived cells to assess suitability of fibronectin adhesion assay to enrich chondroprogenitors Knee; 2020, 27 (3): 755-759 Address: Department of Physiology, Christian Medical College, Vellore 632002,</p>	INT	JAN TO JUN	Physiology, Centre for Stem Cell Research	<p>PMID:32563433 H-INDEX:74 IF: 1.762 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>India. Department of Physiology, Christian Medical College, Vellore 632002, India; Centre for Stem Cell Research (a unit of inStem Bengaluru), Christian Medical College, Vellore 632002, India. Electronic Address: elsyclarence@cmcvellore.ac.in.</p> <p>BACKGROUND: Enhanced chondrogenesis and reduction in hypertrophy are essential pre-requisites for cell-based therapy in regenerative research for cartilage loss. Chondroprogenitors, isolated by fibronectin adhesion assay (FAA), have shown promising results in various preclinical studies due to their inherent characteristics. However, the need for monolayer culture and the effect of expansion on cell phenotype render differentiation between chondroprogenitors and chondrocytes (native cartilage cells) difficult. This is further complicated due to reported de-differentiation of chondrocytes in culture. Thus, the aim of our study was to harvest cells from articular cartilage and compare their gene expression to cells demonstrating adherence and non-adherence to fibronectin. METHOD: Fresh-cells (FC) were isolated from human osteoarthritic knee joints (n = 3) and subjected to FAA. Cells unbound to fibronectin (20 min after plating) were termed as FAA-ve. Attached cells were further cultured for five population doublings and designated FAA+ve. RNA from all three cell groups was assessed for SOX-9, ACAN, COL2A1, COL1A1, RUNX2 and COL10A1. RESULTS: All three groups exhibited moderate to high expression of markers of chondrogenesis and marker of chondrocyte hypertrophy. FAA+ve group exhibited significantly lower levels of hypertrophy markers: RUNX2 (vs FC and FAA-ve, P = 0.018) and COL10A1 (vs FAA-ve, P = 0.005). CONCLUSIONS: Our results demonstrated that fibronectin effectively isolated cells distinct from mature chondrocytes in terms of reduced hypertrophic tendency. This is noteworthy as cells isolated by FAA, retaining their inherent progenitor phenotype, with upregulation of chondrogenic markers may be used successfully for cartilage repair in future translational work.</p>				
286.	<p>Kachroo, U., Livingston, A., Vinod, E., Sathishkumar, S. and Boopalan, Prjvc Comparison of Electrophysiological Properties and Gene Expression between Human Chondrocytes and Chondroprogenitors Derived from Normal and Osteoarthritic Cartilage Cartilage; 2020, 11 (3): 374-384</p> <p>Address: [Kachroo, Upasana; Vinod, Elizabeth; Sathishkumar, Solomon] Christian Med Coll & Hosp, Dept Physiol, Vellore 632002, Tamil Nadu, India. [Livingston, Abel; Boopalan, P. R. J. V. C.] Christian Med Coll & Hosp, Dept Orthopaed, Vellore, Tamil Nadu, India. [Vinod, Elizabeth; Boopalan, P. R. J. V. C.] Christian Med Coll & Hosp, Ctr Stem Cell Res, Vellore, Tamil Nadu, India. Vinod, E (reprint author), Christian Med Coll & Hosp, Dept Physiol, Vellore 632002, Tamil Nadu, India. elsyclarence@cmcvellore.ac.in</p>	INT	JAN TO JUN	Physiology, Orthopaedics, Centre for Stem Cell Research	<p>PMID: 30139266 PMC:7298598 WOS:000540505600012 SCOPUS H-INDEX:28 IF: 3.000 RESUCHIRFY (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Objectives Bone-marrow mesenchymal stem cells (MSCs) and chondrocytes are currently used for cell-based therapy in cartilage repair. Chondroprogenitors (CPs), resident cells of articular cartilage, demonstrate likeness to stem cells. Reports suggest that chondrocytes phenotype is altered in culture, thus making differentiation between the two cell populations difficult. Our objectives were to electrophysiologically assess chondrocytes and CPs, compare their mRNA expression with that of ionic channels already reported in MSCs, and to observe the effect of time in culture and osteoarthritic damage on cells. Design and Results Chondrocytes and CPs at passages 0 (p0) and 5 (p5) derived from normal and osteoarthritic (OA) knee joints were used. Ionic currents were recorded by subjecting cells to depolarizing voltage pulses, and reverse transcriptase-polymerase chain reaction (RT-PCR) was used for studying ion channel expression. Our results demonstrated that both chondrocytes and CPs showed the presence of similar currents belonging to voltage-gated potassium channel subfamily, with RT-PCR confirming high mRNA expression of Maxi K, HKv1.1, HKv1.4, HKv4.2, and hEAG1 channels. Our finding also suggested that CPs were comparatively more sensitive to increased time in culture and inflammatory processes as observed in OA, as was evidenced by the significant decrease in mean current density (p0 normal CP: 183.171 +/- 50.80 pA/pF; p5 normal CP: 50.225 +/- 17.63 pA/pF; P= 0.0280) and significant increase in cellular size (p0 normal CP: 21.564 +/- 2.98 pF; p0 OA CP: 37.939 +/- 3.55 pF; P= 0.0057). Conclusion Both cell types appear to be optimal candidates for cell-based therapy although initial seeding density, cell source (normal vs. OA), and time in culture are matters of concern, prior to cell-type selection.				
287.	<p>Kachroo, U., Ramasamy, B. and Vinod, E. Evaluation of CD49e as a distinguishing marker for human articular cartilage derived chondroprogenitors Knee; 2020, 27 (3): 833-837</p> <p>Address: Department of Physiology, Christian Medical College, Vellore, India. Department of Orthopaedics, Royal Darwin Hospital, Tiwi, NT, Australia. Department of Physiology, Christian Medical College, Vellore, India; Centre for Stem Cell Research, Christian Medical College, Vellore, India. Electronic Address: elsyclarenc@cmcvellore.ac.in.</p> <p>BACKGROUND: Cell-based therapy in cartilage repair can benefit from the use of chondroprogenitors; a cell type classified as mesenchymal stem cells, demonstrating reduced hypertrophy. Fibronectin, routinely used to isolate chondroprogenitors, classically binds to $\alpha 5\beta 1$ integrins (CD49e + CD29), of which CD49e is said to be highly expressed in progenitors. The aim of our study was to assess the specificity of CD49e as a distinguishing marker for chondroprogenitors; because studies report low expression in fresh chondrocytes (FCs), but recent</p>	INT	JAN TO JUN	Physiology, Centre for Stem Cell Research	PMID:32317141 SCOPUS H-INDEX:28 IF: 3.000 RESUCHIRFY (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>conflicting data has exhibited incremental expression of CD49e in cultured chondrocytes. METHODS: FCs were isolated from three human osteoarthritic knee joints and CD49e- cells (sorted by flow cytometry) were cultured in adherent and non-adherent conditions and reassessed for CD49e and CD29 at multiple time points. Colony-forming efficiency (CFE) following fibronectin adhesion assay was calculated for FC, CD49e+ and CD49e- cells. RESULTS: A statistically significant increase in CD49e and CD29 expression was seen in both adherent and non-adherent cultures of CD49e- cells (P < 0.01), as early as 24 h. All groups grew clonally and CFE was similar without any significant difference. CD49e-chondrocytes turned positive when cultured, possibly due to an inherent phenotypic drift, seen after release from cartilage and not because of plastic adherence or chondroprogenitor overgrowth, as non-adherent cultures also showed high expression. CONCLUSIONS: As the specificity of CD49e is questionable, there is a pressing need for a specific differentiating marker, to isolate a pure population of chondroprogenitors, as this cell type shows inherent chondrogenesis and reduced hypertrophy, both requisites for cartilage repair.</p>				
288.	<p>Kachroo, U., Zachariah, S. M., Thambaiiah, A., Tabasum, A., Livingston, A., Rebekah, G., Srivastava, A. and Vinod, E. Comparison of Human Platelet Lysate versus Fetal Bovine Serum for Expansion of Human Articular Cartilage-Derived Chondroprogenitors Cartilage; 2020, 1947603520918635</p> <p>Address: Department of Physiology, Christian Medical College, Vellore, Tamil Nadu, India. Centre for Stem Cell Research, (A unit of InStem, Bengaluru), Christian Medical College, Vellore, Tamil Nadu, India. Department of Orthopaedics, Christian Medical College, Vellore, Tamil Nadu, India. Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India. Department of Haematology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>PURPOSE: Articular chondroprogenitors, a suitable contender for cell-based therapy in cartilage repair, routinely employ fetal bovine serum (FBS) for expansion and differentiation. The possibility of transplant rejections or zoonoses transmissions raise a need for xeno-free alternatives. Use of human platelet lysate (hPL), a nutrient supplement abundant in growth factors, has not been reported for human chondroprogenitor expansion thus far. Our aim was to compare the biological profile of chondroprogenitors grown in hPL versus FBS. METHODS: Chondroprogenitors were isolated from 3 osteoarthritic knee joints. Following differential fibronectin adhesion assay, passage 0 cells grown in (a) 10% FBS and (b) 10% hPL were considered for assessment of growth kinetics, surface marker</p>	INT	JAN TO JUN	Physiology, Centre for Stem Cell Research, Orthopaedics, Biostatistics, Haematology	<p>PMID:32406256 WOS:000532953100001 H-INDEX:74 IF: 1.762 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	expression, gene expression, and trilineage differentiation. Latent transforming growth factor- β 1 (TGF β 1) levels were also measured for each culture medium used. RESULTS: Cellular proliferation was significantly higher in cells grown with hPL (P < 0.01). Surface marker expression was comparable except in CD-146 where hPL group had significantly higher values (P = 0.03). Comparison of mRNA expression revealed notably low values of collagen I, collagen X, aggrecan, and collagen II (P < 0.05). Trilineage differentiation was seen in both groups with higher alizarin red uptake noted in hPL. There were also significantly higher levels of latent TGF β 1 in the medium containing hPL as compared to FBS. CONCLUSIONS: This is the first in vitro xeno-free study to affirm that hPL can serve as an optimal growth supplement for expansion of articular chondroprogenitors, although an in-depth assessment of resident growth factors and evaluation of different dilutions of hPL is required to assess suitability for use in translational research.				
289.	Kachroo, U., Zachariah, S. M., Thambaiyah, P. A., Livingston, A., Rebekah, G., Ramasamy, B., Srivastava, A. and Vinod, E. EVALUATION OF THE EFFECT OF HUMAN PLATELET LYSATE VERSUS FETAL BOVINE SERUM ON HUMAN OSTEOARTHRITIC CARTILAGE DERIVED CHONDROPROGENITORS Osteoarthritis and Cartilage; 2020, 28 S522-S522 Address: [Kachroo, U.; Zachariah, S. Mary; Thambaiyah, A. P.; Livingston, A.; Rebekah, G.; Srivastava, A.; Vinod, E.] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Ramasamy, B.] Royal Darwin Hosp, Tiwi, Australia.	INT	JAN TO JUN	Anesthesiology, Orthopaedics, Clinical Hematology	WOS:000527813600805 H-INDEX:148 IF: 4.879 BIOXBIO (2018/2019)
290.	Kahn, J. M., Brazauskas, R., Tecca, H. R., Bo-Subait, S., Buchbinder, D., Battiwala, M., Flowers, M. E. D., Savani, B. N., Phelan, R., Broglie, L., Abraham, A. A., Keating, A. K., Daly, A., Wirk, B., George, B., Alter, B. P., Ustun, C., Freytes, C. O., Beitinjaneh, A. M., Duncan, C., Copelan, E., Hildebrandt, G. C., Murthy, H. S., Lazarus, H. M., Auletta, J. J., Myers, K. C., Williams, K. M., Page, K. M., Vrooman, L. M., Norkin, M., Byrne, M., Diaz, M. A., Kamani, N., Bhatt, N. S., Rezvani, A., Farhadfar, N., Mehta, P. A., Hematti, P., Shaw, P. J., Kamble, R. T., Schears, R., Olsson, R. F., Hayashi, R. J., Gale, R. P., Mayo, S. J., Chhabra, S., Rotz, S. J., Badawy, S. M., Ganguly, S., Pavletic, S., Nishihori, T., Prestidge, T., Agrawal, V., Hogan, W. J., Inamoto, Y., Shaw, B. E. and Satwani, P. Subsequent neoplasms and late mortality in children undergoing allogeneic transplantation for nonmalignant diseases Blood Advances; 2020, 4 (9): 2084-2094 Address: Division of Pediatric Hematology, Oncology and Stem Cell Transplantation, Department of Pediatrics, Columbia University, New York, NY, United States Center for International Blood and Marrow Transplant Research, Department of Medicine, United States Division of Biostatistics, Institute for Health and Equity, Medical College of Wisconsin, Milwaukee, WI, United States	INT	JAN TO JUN	Clinical Haematology	WOS:000533498800030 SCOPUS H-INDEX:24 IF: NA

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Division of Pediatric Hematology, Children's Hospital of Orange County, Orange, CA, United States</p> <p>Hematology Branch, Sarah Cannon Bone and Marrow Transplant Program, Nashville, TN, United States</p> <p>Clinical Research Division, Fred Hutchinson Cancer Research Center, Seattle, WA, United States</p> <p>Division of Hematology/Oncology, Department of Medicine, Vanderbilt University Medical Center, Nashville, TN, United States</p> <p>Division of Pediatric Hematology/Oncology/BMT, Department of Pediatrics, Medical College of Wisconsin, Milwaukee, WI, United States</p> <p>Division of Blood and Marrow Transplantation, Center for Cancer and Blood Disorders, Children's National Medical Center, Washington, DC, United States</p> <p>Children's Hospital Colorado, University of Colorado, Aurora, CO, United States</p> <p>Tom Baker Cancer Center, Calgary, AB, Canada</p> <p>Division of Bone Marrow Transplant, Seattle Cancer Alliance, Seattle, WA, United States</p> <p>Department of Hematology, Christian Medical College, Vellore, India</p> <p>Clinical Genetics Branch, Division of Cancer Epidemiology and Genetics, National Cancer Institute, National Institutes of Health, Bethesda, MD, United States</p> <p>Division of Hematology/Oncology/Cell Therapy, Rush University, Chicago, IL, United States</p> <p>Texas Transplant Institute, San Antonio, TX, United States</p> <p>Sylvester Comprehensive Cancer Center, University of Miami Health System, Miami, FL, United States</p> <p>Department of Pediatric Oncology, Boston Children's Hospital, Dana-Farber Cancer Institute, Boston, MA, United States</p> <p>Levine Cancer Institute, Atrium Health, Carolinas HealthCare System, Charlotte, NC, United States</p> <p>Markey Cancer Center, University of Kentucky, Lexington, KY, United States</p> <p>Division of Hematology/Oncology, College of Medicine, University of Florida, Gainesville, FL, United States</p> <p>Department of Medicine, University Hospitals Case Medical Center, Seidman Cancer Center, Case Comprehensive Cancer Center, Case Western Reserve University, Cleveland, OH, United States</p> <p>Blood and Marrow Transplant Program and Host Defense Program, Division of Hematology/Oncology/Bone Marrow Transplant and Infectious Diseases, Nationwide Children's Hospital, Columbus, OH, United States</p> <p>Department of Pediatrics, University of Cincinnati College of Medicine, Cincinnati, OH, United States</p> <p>Division of Bone Marrow Transplantation and Immune Deficiency, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, United States</p> <p>Children's Research Institute, Children's National Health Systems, Washington, DC, United States</p> <p>Division of Pediatric Blood and Marrow Transplantation, Duke University Medical</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Center, Durham, NC, United States Department of Hematology/Oncology, Hospital Infantil Universitario Nino Jesus, Madrid, Spain Center for Cancer and Blood Disorders, Children's National Medical Center, Washington, DC, United States St Jude Children's Research Hospital, Memphis, TN, United States Stanford Health Care, Stanford, CA, United States Division of Hematology/Oncology/Bone Marrow Transplantation, Department of Medicine, University of Wisconsin-Madison, Madison, WI, United States Children's Hospital at Westmead, Westmead, NSW, Australia Division of Hematology and Oncology, Center for Cell and Gene Therapy, Baylor College of Medicine, Houston, TX, United States Division of Hematology/Bone Marrow Transplant, Mayo Clinic, Rochester, MN, United States Department of Laboratory Medicine, Karolinska Institutet, Stockholm, Sweden Centre for Clinical Research Sormland, Uppsala University, Uppsala, Sweden Division of Pediatric Hematology/Oncology, Department of Pediatrics, School of Medicine, Washington University in St. Louis, St. Louis, MO, United States Hematology Research Center, Division of Experimental Medicine, Department of Medicine, Imperial College London, London, United Kingdom Lawrence S. Bloomberg Faculty of Nursing, University of Toronto, Toronto, ON, Canada Division of Hematology, Oncology and Stem Cell Transplant, Ann and Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, United States Department of Pediatrics, Feinberg School of Medicine, Northwestern University, Chicago, IL, United States Division of Hematological Malignancy and Cellular Therapeutics, University of Kansas Health System, Kansas City, KS, United States Experimental Transplantation and Immunology Branch, Center for Cancer Research, National Cancer Institute, National Institutes of Health, Bethesda, MD, United States Department of Blood and Marrow Transplantation, H. Lee Moffitt Cancer Center and Research Institute, Tampa, FL, United States Blood and Cancer Center, Starship Children's Hospital, Auckland, New Zealand Simon Cancer Center, Indiana University, Indianapolis, IN, United States Division of Hematopoietic Stem Cell Transplantation, National Cancer Center Hospital, Tokyo, Japan</p> <p>We examined the risk of subsequent neoplasms (SNs) and late mortality in children and adolescents undergoing allogeneic hematopoietic cell transplantation (HCT) for nonmalignant diseases (NMDs). We included 6028 patients (median age, 6 years; interquartile range, 1-11; range, 1 to 20) from the Center for International Blood and Marrow Transplant Research (1995-2012) registry. Standardized mortality ratios (SMRs) in 2-year survivors and standardized incidence ratios</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	(SIRs) were calculated to compare mortality and SN rates with expected rates in the general population. Median follow-up of survivors was 7.8 years. Diagnoses included severe aplastic anemia (SAA; 24%), Fanconi anemia (FA; 10%), other marrow failure (6%), hemoglobinopathy (15%), immunodeficiency (23%), and metabolic/ leukodystrophy syndrome (22%). Ten-year survival was 93% (95% confidence interval [95% CI], 92% to 94%; SMR, 4.2; 95% CI, 3.7-4.8). Seventy-one patients developed SNs (1.2%). Incidence was highest in FA (5.5%), SAA (1.1%), and other marrow failure syndromes (1.7%); for other NMDs, incidence was,1%. Hematologic (27%), oropharyngeal (25%), and skin cancers (13%) were most common. Leukemia risk was highest in the first 5 years posttransplantation; oropharyngeal, skin, liver, and thyroid tumors primarily occurred after 5 years. Despite a low number of SNs, patients had an 11-fold increased SN risk (SIR, 11; 95% CI, 8.9-13.9) compared with the general population. We report excellent long-term survival and low SN incidence in an international cohort of children undergoing HCT for NMDs. The risk of SN development was highest in patients with FA and marrow failure syndromes, highlighting the need for long-term posttransplantation surveillance in this population. © 2020 American Society of Hematology. All rights reserved.				
291.	<p>Kaiser, S., Yacob, M. and Abhilash, K. P. P. Profile and outcome of patients with ground-level falls J Family Med Prim Care; 2020, 9 (2): 614-618</p> <p>Address: Department of Emergency Medicine, Christian Medical College, Vellore, Tamil Nadu, India. Department of General Surgery, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND: A ground-level fall is one of the most common modes of injury sustained across all age groups. For older adults, ground level falls can result in multiple injuries and are associated with significant morbidity and mortality. METHODOLOGY: This retrospective observational study included all patients presenting with fall from a ground level to our emergency department (ED) from January 2018 to December 2018. Demographics, details of incident, severity of injury, and outcome were analyzed. RESULTS: During the study period, 596 patients with a mean age of 40.9 (standard deviation [SD]: 25.9) years were included in the analysis. A quarter (23%) were aged less than 15 years, while the elderly (>60 years) comprised of 29.5%. Half the patients were triaged as priority 2 (53.8%). The lower limbs (36.6%), upper limbs (23.9%), and face (15.3%) were the body areas that were most commonly injured. The new injury severity score (NISS) was more than 8 in 28% of patients. Multivariate logistic regression analysis showed the elderly (>60 years) to have a higher odds (2.51 95% confidence interval [CI]: 1.57-4.02) of sustaining a fracture of a dislocation. One fifth of the patients (120/596; 20.1%) required hospital admission with only one fatality.</p>	NAT	JAN TO JUN	Emergency Medicine, General Surgery	<p>PMID:32318391 PMC ID: PMC7113992</p> <p>H-INDEX:NA IF: 0.210 RG (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Fifteen patients (2.5%) left the hospital against medical advice. Two-thirds (66.3%) required only conservative management, while 19.9% required major surgical intervention. CONCLUSION: A ground-level fall is a common mode of injury in children (<15 years) and the elderly (>60 years). The extremities and face are the most common areas of the body that are prone to injuries. Age-friendly infrastructure modifications at home, work places, and in public areas for elders and ensuring playground safety for children are the needs of the hour to decrease falls on level ground.				
292.	<p>Kalra, P., John, A., Jaleel, R., Simon, E. G., Babji, S. and Joseph, A. J. Prevalence of past hepatitis A infection among Crohn's patients and controls - An examination of the 'hygiene hypothesis', and the need for hepatitis A vaccination Trop Doct; 2020, 49475520961949 Address: Senior Registrar, Department of Gastroenterology, Christian Medical College & Hospital, Vellore, Tamil Nadu, India. Assistant Professor, Department of Gastroenterology, Christian Medical College & Hospital, Vellore, Tamil Nadu, India. Professor, Department of Gastroenterology, Christian Medical College & Hospital, Vellore, Tamil Nadu, India. Associate Professor, Department of GI Sciences, Christian Medical College & Hospital, Vellore, Tamil Nadu, India.</p> <p>Our study aimed to determine the prevalence of prior exposure to hepatitis A virus in Crohn's disease patients, whose IgG antibody levels against hepatitis A virus were compared with age and sex-matched controls. All of the 41 cases with Crohn's disease and 43 controls included in the study tested positive for IgG anti-hepatitis A virus antibody, with titres (38.8 IU/ml, 22-63.9; median, IQR) similar to those in controls (40.7 IU/ml, 17.3-66.7; p = 0.75). Environmental sanitation remains poor in India, despite reasonable economic gains as reflected by universal exposure to hepatitis A virus infection. Vaccination against hepatitis A may not be important in patients attending inflammatory bowel disease clinic, owing to natural immunity provided by prior infection. The observed rise in inflammatory bowel disease incidence seems to be increasing despite persistently poor environmental hygiene.</p>	INT	JUL TO DEC	Gastroenterology, GI Sciences	PMID: 33050841
293.	<p>Kalra, S., Kapoor, N., Bhattacharya, S., Aydin, H. and Coetzee, A. Barocrinology: The Endocrinology of Obesity from Bench to Bedside Med Sci (Basel); 2020, 8 (4): Address: Bharti Hospital, Karnal 132001, India. Christian Medical College Vellore, Vellore 632004, India. NCD Unit, Melbourne School of Population and Global Health, University of Melbourne, Melbourne 3004, Australia. Department of Endocrinology, Max Superspeciality Hospital, Patparganj 110092, India. Department of Internal Medicine, Yeditepe University Hospital, 34755 Istanbul, Turkey. Division of Endocrinology, Stellenbosch University, Cape Town 8000, South Africa. Obesity has reached pandemic proportions. Hormonal and metabolic imbalances</p>	INT	JUL TO DEC	Endocrinology	PMID: 33371340 PMC:7768467

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>are the key factors that lead to obesity. South Asian populations have a unique phenotype, peculiar dietary practices, and a high prevalence of consanguinity. Moreover, many lower middle-income countries lack appropriate resources, super-specialists, and affordability to manage this complex disorder. Of late, there has been a substantial increase in both obesity and diabetes in India. Thus, many more patients are being managed by different types of bariatric procedures today than ever before. These patients have many types of endocrine and metabolic disturbances before and after bariatric surgery. Therefore, these patients should be managed by experts who have knowledge of both bariatric surgery and endocrinology. The authors propose "Barocrinology", a novel terminology in medical literature, to comprehensively describe the field of obesity medicine highlighting the role of knowing endocrine physiology for understating its evolution, insights into its complications and appreciating the changes in the hormonal milieu following weight loss therapies including bariatric surgery. Barocrinology, coined as a portmanteau of "baro" (weight) and endocrinology, focuses upon the endocrine and metabolic domains of weight physiology and pathology. This review summarizes the key pointers of bariatric management from an endocrine perspective.</p>				
294.	<p>Kamath, M. S., Antonisamy, B. and Sunkara, S. K. Zygotic splitting following embryo biopsy: a cohort study of 207 697 single-embryo transfers following IVF treatment BJOG: An International Journal of Obstetrics and Gynaecology; 2020, 127 (5): 562-569</p> <p>Address: Department of Reproductive Medicine, Christian Medical College, Vellore, India Department of Biostatistics, Christian Medical College, Vellore, India Division of Women's Health, Faculty of Life Sciences and Medicine, King's College London, London, United Kingdom</p> <p>Objective: To evaluate the risk of monozygotic splitting with embryo biopsy during in vitro fertilisation (IVF). Design: A cohort study. Setting: Anonymised assisted reproductive technology national data from the Human Fertilisation and Embryology Authority, UK. Population: Women undergoing single-embryo transfer (SET) following either pre-implantation genetic testing (PGT) involving embryo biopsy or IVF without PGT. Methods: Data on women undergoing SET either following PGT and non-PGT IVF treatment in 2000–2016 were analysed to compare the risk of zygotic splitting and monozygotic twinning. Logistic regression analysis was performed adjusting for potential confounders. Main outcomes: Monozygotic spitting, monozygotic twin birth. Results: Data comprising a total of 207 697 SET cycles (4544 following PGT and 203 153 following non-PGT IVF) were analysed. The live birth rate per embryo transfer was 31.9% (95% confidence interval [CI] 30.5–33.2%) following PGT and 26.9% (95% CI 26.7–27.1%) following</p>	INT	JAN TO JUN	Reproductive Medicine, Biostatistics	<p>SCOPUS H-INDEX:156 IF: 5.193 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	non-PGT IVF. The incidence of zygotic splitting following PGT was 2.4% (95% CI 1.7–3.3%) versus 1.5% (95% CI 1.4–1.6%) following non-PGT IVF. There was a significantly higher risk of zygotic splitting with PGT versus non-PGT IVF cycles (odds ratio [OR] 1.64, 95% CI 1.19–2.27). The higher risk of zygotic splitting with PGT cycles remained significant after adjusting for potential confounders (adjusted OR 1.51, 95% CI 1.06–2.15). Conclusions: The present study demonstrated an increased risk of monozygotic splitting with embryo biopsy. Given the current sparse literature, it is important to accumulate further evidence to validate the findings. Tweetable abstract: A likely increased risk of monozygotic splitting following embryo biopsy. © 2019 Royal College of Obstetricians and Gynaecologists				
295.	<p>Kamath, M. S., Kirubakaran, R. and Sunkara, S. K. Granulocyte-colony stimulating factor administration for subfertile women undergoing assisted reproduction Cochrane Database Syst Rev; 2020, 1 (1): Cd013226</p> <p>Address: Christian Medical College, Department of Reproductive Medicine, Ida Scudder Road, Vellore, Tamil Nadu, India, 632004. Christian Medical College, Cochrane South Asia, Prof. BV Moses Centre for Evidence-Informed Healthcare and Health Policy, Carman Block II Floor, CMC Campus, Bagayam, Vellore, India, 632002. King's College London, Division of Women's Health, Faculty of Life Sciences & Medicine, Strand, London, UK, WC2R 2LS.</p> <p>BACKGROUND: Granulocyte-colony stimulating factor (G-CSF) seems to play an important role in the process of embryo implantation and continuation of pregnancy. It has been used during in vitro fertilisation (IVF) treatment for subfertile women with chronically thin endometrium and those with previous multiple IVF failures. It is currently unknown whether G-CSF is effective in improving results following assisted reproductive technology (ART). OBJECTIVES: To evaluate the effectiveness and safety of G-CSF in women undergoing ART. SEARCH METHODS: We searched the Cochrane Gynaecology and Fertility Group Specialised Register, CENTRAL, MEDLINE, Embase, ClinicalTrials.gov, and the World Health Organization International Clinical Trials Registry Platform in February 2019. We searched reference lists of relevant articles and handsearched relevant conference proceedings. SELECTION CRITERIA: Randomised controlled trials (RCTs) comparing G-CSF administration versus no treatment or placebo in subfertile women undergoing IVF treatment. DATA COLLECTION AND ANALYSIS: Two review authors independently screened studies, extracted data, and assessed risk of bias. The primary outcomes were live-birth rate and miscarriage rate following G-CSF administration. We have reported ongoing pregnancy rate in cases where studies did not report live birth but reported ongoing pregnancy. Secondary outcomes were clinical pregnancy rate, multiple pregnancy rate, adverse events,</p>	INT	JAN TO JUN	Reproductive Medicine, Cochrane South Asia	<p>PMID:31978254 PMC ID: PMC6984624 WOS:000510398500018 SCOPUS H-INDEX:261 IF: 7.755 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>ectopic pregnancy rate, small for gestational age at birth, abnormally adherent placenta, and congenital anomaly rate. We analysed data using risk ratio (RR), Peto odds ratio and a fixed-effect model. We assessed the quality of the evidence using the GRADE criteria. MAIN RESULTS: We included 15 trials involving 622 women who received G-CSF and 631 women who received placebo or no additional treatment during IVF. The main limitations in the quality of the evidence were inadequate reporting of study methods and high risk of performance bias due to lack of blinding. We assessed only two of the 15 included trials as at a low risk of bias. None of the trials reported the primary effectiveness outcome of live-birth rate. We are uncertain whether G-CSF administration improves ongoing pregnancy rate compared to control in subfertile women undergoing ART (RR 1.42, 95% confidence interval (CI) 0.83 to 2.42; 2 RCTs; participants = 263; I² = 0%; very low-quality evidence). For a typical clinic with 14% ongoing pregnancy rate, G-CSF administration would be expected to result in ongoing pregnancy rates between 12% and 35%. We are uncertain whether G-CSF administration reduces miscarriage rate (Peto odds ratio 0.55, 95% CI 0.17 to 1.83; 3 RCTs; participants = 391; I² = 0%; very low-quality evidence) compared to the control group in subfertile women undergoing ART. We are uncertain whether G-CSF administration improves overall clinical pregnancy rate compared to control in subfertile women undergoing ART (RR 1.63, 95% CI 1.32 to 2.01; 14 RCTs; participants = 1253; I² = 13%; very low-quality evidence). For a typical clinic with 17% clinical pregnancy rate, G-CSF administration would be expected to result in clinical pregnancy rates between 23% and 35%. In the unselected IVF population, we are uncertain whether G-CSF administration improves clinical pregnancy rate compared to the control group (RR 1.11, 95% CI 0.77 to 1.60; 3 RCTs; participants = 404; I² = 0%; low-quality evidence). G-CSF administration may improve clinical pregnancy rate in women with two or more previous IVF failures compared to the control group (RR 2.11, 95% CI 1.56 to 2.85; 7 RCTs; participants = 643; I² = 0%; low-quality evidence). In subfertile women with thin endometrium undergoing ART, we are uncertain whether G-CSF administration improves clinical pregnancy rate compared to the control group (RR 1.58, 95% CI 0.95 to 2.63; 4 RCTs; participants = 206; I² = 30%; low-quality evidence). No study reported on multiple pregnancy rate. Only four trials reported adverse events as an outcome, and none of them reported any major adverse events following either G-CSF administration or placebo/no treatment. AUTHORS' CONCLUSIONS: In subfertile women undergoing ART, we are uncertain whether the administration of G-CSF improves ongoing pregnancy or overall clinical pregnancy rates or reduces miscarriage rate compared to no treatment or placebo, whether in all women or those with thin endometrium, based on very low-quality evidence. Low-quality evidence suggests that G-CSF administration may improve clinical pregnancy rate in women with two or more IVF failures, but the included studies had unclear allocation concealment or were at high risk of performance bias.</p> <p>Sesh Kamal Sunkara has participated as speaker in symposia by Merck, MSD, and Ferring.</p>				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
296.	<p>Kamath, M. S., Mascarenhas, M., Kirubakaran, R. and Bhattacharya, S. Number of embryos for transfer following in vitro fertilisation or intra-cytoplasmic sperm injection The Cochrane database of systematic reviews; 2020, 8 CD003416 Address: Department of Reproductive Medicine, Christian Medical College, Vellore, India. Leeds Fertility, The Leeds Centre for Reproductive Medicine, Seacroft Hospital, Leeds, UK. Cochrane South Asia, Prof. BV Moses Centre for Evidence-Informed Healthcare and Health Policy, Christian Medical College, Vellore, India. Obstetrics and Gynaecology, Aberdeen Maternity Hospital, Aberdeen, UK. BACKGROUND: Transfer of more than one embryo during in vitro fertilisation (IVF) or intracytoplasmic sperm injection (ICSI) increases multiple pregnancy rates resulting in an increased risk of maternal and perinatal morbidity. Elective single embryo transfer offers a means of minimising this risk, but this potential gain needs to be balanced against the possibility of jeopardising the overall live birth rate (LBR). OBJECTIVES: To evaluate the effectiveness and safety of different policies for the number of embryos transferred in infertile couples undergoing assisted reproductive technology cycles. SEARCH METHODS: We searched the Cochrane Gynaecology and Fertility Group specialised register of controlled trials, CENTRAL, MEDLINE, Embase, ClinicalTrials.gov, and the World Health Organization International Clinical Trials Registry Platform from inception to March 2020. We handsearched reference lists of articles and relevant conference proceedings. We also communicated with experts in the field regarding any additional studies. SELECTION CRITERIA: We included randomised controlled trials (RCTs) comparing different policies for the number of embryos transferred following IVF or ICSI in infertile women. Studies of fresh or frozen and thawed transfer of one to four embryos at cleavage or blastocyst stage were eligible. DATA COLLECTION AND ANALYSIS: Two review authors independently extracted data and assessed trial eligibility and risk of bias. The primary outcomes were LBR and multiple pregnancy rate. The secondary outcomes were clinical pregnancy and miscarriage rates. We analysed data using risk ratios (RR), Peto odds ratio (Peto OR) and a fixed effect model. MAIN RESULTS: We included 17 RCTs in the review (2505 women). The main limitation was inadequate reporting of study methods and moderate to high risk of performance bias due to lack of blinding. A majority of the studies had low numbers of participants. None of the trials compared repeated single embryo transfer (SET) with multiple embryo transfer. Reported results of multiple embryo transfer below refer to double embryo transfer. Repeated single embryo transfer versus multiple embryo transfer in a single cycle Repeated SET was compared with double embryo transfer (DET) in four studies of cleavage-stage transfer. In these studies the SET group received either two cycles of fresh SET (one study) or one cycle of fresh SET followed by one frozen SET (three studies). The cumulative live birth rate after repeated SET may be little or no different from the rate after one cycle of DET (RR 0.95, 95% CI (confidence interval) 0.82 to 1.10; I² = 0%; 4 studies,</p>	INT	JUL TO DEC	Reproductive Medicine, Cochrane South Asia	PMID: 32827168

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>985 participants; low-quality evidence). This suggests that for a woman with a 42% chance of live birth following a single cycle of DET, the repeated SET would yield pregnancy rates between 34% and 46%. The multiple pregnancy rate associated with repeated SET is probably reduced compared to a single cycle of DET (Peto OR 0.13, 95% CI 0.08 to 0.21; $I^2 = 0\%$; 4 studies, 985 participants; moderate-quality evidence). This suggests that for a woman with a 13% risk of multiple pregnancy following a single cycle of DET, the risk following repeated SET would be between 0% and 3%. The clinical pregnancy rate (RR 0.99, 95% CI 0.87 to 1.12; $I^2 = 47\%$; 3 studies, 943 participants; low-quality evidence) after repeated SET may be little or no different from the rate after one cycle of DET. There may be little or no difference in the miscarriage rate between the two groups. Single versus multiple embryo transfer in a single cycle A single cycle of SET was compared with a single cycle of DET in 13 studies, 11 comparing cleavage-stage transfers and three comparing blastocyst-stage transfers. One study reported both cleavage and blastocyst stage transfers. Low-quality evidence suggests that the live birth rate per woman may be reduced in women who have SET in comparison with those who have DET (RR 0.67, 95% CI 0.59 to 0.75; $I^2 = 0\%$; 12 studies, 1904 participants; low-quality evidence). Thus, for a woman with a 46% chance of live birth following a single cycle of DET, the chance following a single cycle of SET would be between 27% and 35%. The multiple pregnancy rate per woman is probably lower in those who have SET than those who have DET (Peto OR 0.16, 95% CI 0.12 to 0.22; $I^2 = 0\%$; 13 studies, 1952 participants; moderate-quality evidence). This suggests that for a woman with a 15% risk of multiple pregnancy following a single cycle of DET, the risk following a single cycle of SET would be between 2% and 4%. Low-quality evidence suggests that the clinical pregnancy rate may be lower in women who have SET than in those who have DET (RR 0.70, 95% CI 0.64 to 0.77; $I^2 = 0\%$; 10 studies, 1860 participants; low-quality evidence). There may be little or no difference in the miscarriage rate between the two groups. AUTHORS' CONCLUSIONS: Although DET achieves higher live birth and clinical pregnancy rates per fresh cycle, the evidence suggests that the difference in effectiveness may be substantially offset when elective SET is followed by a further transfer of a single embryo in fresh or frozen cycle, while simultaneously reducing multiple pregnancies, at least among women with a good prognosis. The quality of evidence was low to moderate primarily due to inadequate reporting of study methods and absence of masking those delivering, as well as receiving the interventions.</p>				
297.	<p>Kamath, V., Yoganathan, S., Thomas, M. M., Gowri, M. and Chacko, M. P. Utility of Chromosomal Microarray in Children with Unexplained Developmental Delay/Intellectual Disability Fetal Pediatr Pathol; 2020, 1-11 Address: Department of Cytogenetics, Christian Medical College and Hospital, Vellore, India. Department of Neurological Sciences, Christian Medical College and Hospital, Vellore, India.</p>	INT	JUL TO DEC	Cytogenetics, , Neurological Sciences, Biostatistics	PMID: 32701375

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Department of Biostatistics, Christian Medical College and Hospital, Vellore, India.</p> <p>To evaluate the chromosomal microarray (CMA) yield among children who presented with global developmental delay/intellectual disability (GDD/ID) with/without co-occurring conditions. Methods: The pathogenic copy number variation (pCNVs) findings on CMA of all children who presented with unexplained GDD/ID were categorized based on the clinical features. The karyotype results were compared with CMA. Results: The overall pCNV yield in children presenting with GDD/ID with or without comorbid conditions constituted 20.9%. Among the 17 pCNVs, 13 were losses and four were gains. Cardiac defect was the only comorbidity in our study that demonstrated statistically significant prediction for pCNV (odds ratio 6.13, p value- 0.031). Six children who were karyotyped prior to CMA testing showed a structural abnormality. Conclusions: In our study, 20.9% of children with GDD/ID showed pCNVs on CMA. Cardiac defect alongside GDD/ID, emerged as the single strongest phenotype associated with pCNVs. CMA also provided vital information in previously karyotyped patients.</p>				
298.	<p>Kamdar, P., Thomas, M., Yoganathan, S., Muthusamy, K., Koshy, B., Oommen, S. P., Aaron, R., Barney, A., Abraham, S. S. C. and Danda, S.</p> <p>Methyl-CpG-binding protein 2 gene mutations and its association with epilepsy: a single centre study from the Indian subcontinent Journal of Genetics; 2020, 99 (1): Address: Medical Genetics, Christian Medical College, Vellore, 632 004, India</p> <p>Neurological Sciences, Christian Medical College, Vellore, 632 004, India Developmental Paediatrics, Christian Medical College, Vellore, 632 004, India</p> <p>Rett syndrome (RTT) is an X-linked disorder caused by mutations in MECP2 in majority of cases. It is characterized by arrested development between 6 and 18 months of age, regression of acquired hand skills and speech, stereotypic hand movements, gait abnormalities and seizures. There are a very few studies in India which illustrates mutation spectrum in RTT. None of the studies have correlated seizures with the genotype. This study describes the phenotype and genotype spectrum in children with RTT syndrome and analyses the association of epilepsy with various clinical features and molecular findings. All children with RTT in our cohort had global developmental delay. Genetic diagnosis identified mutations of the MECP2 in all 25 children where RTT was suspected. We have identified point mutations in 20 patients, one insertion and four deletions by Sanger sequencing, namely c.1164_1207 (44 bp), c.1165_1207 (43 bp), c.1157_1197 (41 bp) del and c.1157_1188 (32 bp). Clinically, none of the patients with deletion had seizures. We identified one novel insertion variant c.337_338 (p.S113Ffs*9). All the deletions were located in the C-terminal region. Majority of the mutations (22/25) were identified in exon 4 which comprised of nonsense and missense types. Screening of hotspot mutations in exon 4 should be the first line evaluation in diagnosis of RTT. Molecular testing could help in specific management of seizures in RTT. © 2020, Indian Academy of Sciences.</p>	INT	JUL TO DEC	Medical Genetics, Neurological Sciences, Developmental Paediatrics	SCOPUS

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
299.	<p>Kandasamy, S. Is It All Clear if Procalcitonin Clears in Acute Pancreatitis? Indian J Crit Care Med; 2020, 24 (3): 149-150</p> <p>Address: Division of Critical Care, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>How to cite this article: Kandasamy S. Is It All Clear if Procalcitonin Clears in Acute Pancreatitis? Indian J Crit Care Med 2020;24(3):149-150.</p>	NAT	JAN TO JUN	Critical Care Unit	<p>PMID:32435089 PMC ID: PMC7225770 H-INDEX:27 IF: 0.590 RG (2018/2019)</p>
300.	<p>Kannan, K., John, R., Kundu, D., Dayanand, D., Abhilash, K. P. P., Mathuram, A. J., Zachariah, A., Sathyendra, S., Hansdak, S. G., Abraham, O. C., Gunasekaran, K., Iyadurai, R., Abraham, A. M., Prakash, J. A. J., Yesudhasan, B. L., Veeraraghavan, B., Kavitha, M. L., Jose, L. R., Sumana, M. N., Saravu, K. and Varghese, G. M. Performance of molecular and serologic tests for the diagnosis of scrub typhus PLoS Negl Trop Dis; 2020, 14 (11): e0008747</p> <p>Address: Department of Infectious Diseases, Christian Medical College, Vellore, Tamil Nadu, India. Department of Emergency Medicine, Christian Medical College, Vellore, Tamil Nadu, India. Department of Medicine, Christian Medical College, Vellore, Tamil Nadu, India. Department of Clinical Virology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Microbiology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Haematology, Christian Medical College, Vellore, Tamil Nadu, India. JSS Medical College, Mysuru, Karnataka India. Department of Infectious Diseases, Kasturba Medical College, Manipal, Manipal Academy of Higher Education, Karnataka, India.</p> <p>Diagnosis of scrub typhus, caused by the bacterium <i>Orientia tsutsugamushi</i>, is challenging because of the overlap of its non-specific symptoms with other infections coupled with the lack of sufficient data on the performance of diagnostic tests. Early diagnosis of scrub typhus is crucial to improve outcomes and this study evaluates the diagnostic performance of various tests. The present study aims at assessing the accuracy of various rapid diagnostic tests, serologic tests, and nucleic acid amplification methods on well-characterized patient samples. Adult patients with acute febrile illness and manifestations suggestive of scrub typhus confirmed by positive PCR in the blood, eschar or tissue were characterized as cases. Patients with acute febrile illness and a confirmed alternate etiology such as culture-confirmed typhoid, smear/PCR positive for malaria, PCR/NS1 antigen positive for dengue, PCR positive for influenza, PCR/MAT positive for leptospirosis, PCR positive for spotted fever were characterized as controls with other infections. The</p>	INT	JUL TO DEC	Infectious Diseases, Emergency Medicine, Medicine, Clinical Virology, Microbiology, Haematology	<p>PMID: 33180784 PMC:7660479</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>healthy controls consisted of subjects from the same geographic region. We performed the following tests on blood samples for scrub typhus and calculated the sensitivity, specificity, positive predictive value, and negative predictive value: (1) Quantitative real time PCR using 47kDa gene (qPCR); (2) Conventional PCR using 56kDa gene (cPCR); (3) Loop-mediated isothermal amplification assay (LAMP assay); (4) Immunofluorescence assay (IFA); (5) Enzyme-linked immunosorbent assay (ELISA); (6) Weil-Felix test(WF test); and (7) Immunochromatographic Rapid Diagnostic Test (RDT).Among the 316 participants, 158 had confirmed scrub typhus (cases) and 158 were controls. ELISA and RDT detecting Orientia tsutsugamushi specific IgM antibodies had excellent discriminative potential with sensitivities and specificities of 92%, 94% and 92%, 92% respectively. The sensitivity and specificity of IFA were found to be 95% and 74% respectively. IgM serology had a false positivity rate of 8% with other acute febrile illnesses such as dengue, leptospirosis and spotted fever due to the nonspecific binding of the pentavalent IgM. LAMP assay had 91.7% sensitivity and 77.2% specificity while qPCR provided excellent sensitivity (97%) and perfect specificity. In conclusion, ELISA and RDT detecting Orientia tsutsugamushi specific IgM antibodies have excellent sensitivity and specificity while the accuracy of IFA is suboptimal for the diagnosis of scrub typhus. Given its perfect specificity and superior sensitivity, qPCR is preferred for diagnostic confirmation in reference laboratories particularly for diagnosis of early disease with less than 7 days duration. This study provides a comprehensive evaluation of all currently available diagnostic tests for scrub typhus. paid to write this article. The authors have declared that no competing interests exist.</p>				
301.	<p>Kanuj, M., Anand, R., Venkatraman, R. and Mayank, G. Paediatric Renal Synovial Sarcoma: Another Diagnostic Pathological Dilemma Indian Journal of Surgical Oncology; 2020, 11 (1): 138-141</p> <p>Address: Department of Surgical Oncology, Cancer Institute (WIA), Chennai, India Department of Medical Oncology, Cancer Institute (WIA), Chennai, India Department of Pathology, Christian Medical College, Vellore, India</p>	NAT	JAN TO JUN	Pathology	<p>SCOPUS H-INDEX:14 IF: 0.610 RESURCHIFY (2018/2019)</p>
302.	<p>Kapoor, N., Jiwanmall, S. A., Nandyal, M. B., Kattula, D., Paravathareddy, S., Paul, T. V., Furler, J., Oldenburg, B. and Thomas, N. Metabolic Score for Visceral Fat (METS-VF) Estimation - A Novel Cost-Effective Obesity Indicator for Visceral Adipose Tissue Estimation Diabetes Metab Syndr Obes; 2020, 13 3261-3267</p> <p>Address: Department of Endocrinology, Diabetes and Metabolism Christian Medical College & Hospital, Vellore, Tamil Nadu, India. Non-Communicable Disease Unit, Melbourne School of Population and Global Health, University of Melbourne, Melbourne, Australia. Department of Psychiatry, Christian Medical College & Hospital, Vellore, Tamil Nadu, India. Department of General Practice, University of Melbourne, Melbourne, Australia.</p>	INT	JUL TO DEC	Endocrinology, Diabetes and Metabolism, Psychiatry	<p>PMID: 32982356 PMC:7507406</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>BACKGROUND: Visceral adipose tissue (VAT) assessment is limited in clinical practice due to expensive, time consuming and limited availability of MRI and DXA machines. We explored the utility of a recently developed Metabolic Score for Visceral Fat (METS-VF) to assess VAT in south Asian individuals with morbid obesity. PATIENTS AND METHODS: Individuals with BMI ≥ 35 kg/m² aged between 30 and 60 years were randomly selected from a database of individuals with morbid obesity, attending a multi-disciplinary bariatric clinic in a tertiary care teaching hospital in southern India. Body composition was assessed by using a Hologic Discovery A dual-energy X-ray absorptiometry (DXA) machine. METS-VF was used to estimate VAT by using a previously published algorithm. RESULTS: The mean age and body mass index of the study subjects (N=350) were 38.2 years and 40.1 kg/m². The METS-VF score performed satisfactorily (AUC of 0.78 (95% CI 0.72-0.85)) for predicting an increased visceral adipose tissue (VAT area ≥ 163 cm²) as detected by DXA. A METS-VF value of 7.3 was found to have a good sensitivity and reasonable specificity in predicting elevated VAT in this population. CONCLUSION: This is the first study to validate the utility of METS-VF as a surrogate measure of visceral adiposity in south Indian individuals with morbid obesity. Given the simplicity, easy availability, reliability and inexpensive nature of this obesity indicator, it may find its widespread use in lower middle-income countries.</p>				
303.	<p>Kapoor, N., Kalra, S., Kota, S., Das, S., Jiwanmall, S. and Sahay, R. The SECURE model: A comprehensive approach for obesity management JPMA. The Journal of the Pakistan Medical Association; 2020, 70 (8): 1468-1469s Address: Department of Endocrinology, Christian Medical College, Vellore, india. Department of Endocrinology, Bharti Hospital, Karnal, India. Diabetes and Endocare Clinic, Berhampur, Odisha, India. Hi Tech Medical College and Hospital, Bhubaneshwar, India. Dept. of Psychiatry, Christian Medical College, Vellore, India. Department of Endocrinology, Osmania Medical College, Hyderabad, India. With rapidly increasing prevalence of obesity worldwide, it has become imperative to generate a comprehensive and easy to use clinical model for its management. We propose a simplified yet systematic approach to an obese patient, for a personalised patient centric obesity management. The SECURE model encompasses three domains in evaluation of the patient (Severity assessment, Etiological evaluation and Comorbidity workup) and the other three pillars for obesity treatment (Urge life style changes, Role of medications and surgery and Expected goal setting). This provides a clinical action checklist that may be useful even in other chronic non communicable disorders.</p>	INT	JUL TO DEC	Endocrinology, Psychiatry	PMID: 32794511
304.	<p>Kapoor, N., Lotfaliany, M., Sathish, T., Thankappan, K. R., Thomas, N., Furler, J., Oldenburg, B. and Tapp, R. J. Obesity indicators that best predict type 2 diabetes in an Indian population: Insights from the Kerala Diabetes Prevention Program Journal of Nutritional Science; 2020,</p>	INT	JAN TO JUN	Endocrinology	SCOPUS H-INDEX:19 IF: 1.125 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Address: Department of Endocrinology, Diabetes and Metabolism, Christian Medical College and Hospital, Tamil Nadu, Vellore, India Melbourne School of Population and Global Health, Dentistry and Health Science, University of Melbourne, Melbourne, VIC, Australia Population Health Research Institute, McMaster University, Hamilton, ON, Canada Centre for Population Health Sciences, Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore, Singapore Achutha Menon Centre for Health Science Studies, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Kerala, Trivandrum, India Department of Public Health and Community Medicine, Central University, Kerala, Kasaragod, India Department of General Practice, Faculty of Medicine, University of Melbourne, Melbourne, VIC, Australia School of Biomedical Engineering and Imaging Sciences, King's College London, London, United Kingdom</p> <p>Obesity indicators are known to predict the presence of type 2 diabetes mellitus (T2DM); however, evidence for which indicator best identifies undiagnosed T2DM in the Indian population is still very limited. In the present study we examined the utility of different obesity indicators to identify the presence of undiagnosed T2DM and determined their appropriate cut point for each obesity measure. Individuals were recruited from the large-scale population-based Kerala Diabetes Prevention Program. Oral glucose tolerance tests was performed to diagnose T2DM. Receiver operating characteristic (ROC) curve analyses were used to compare the association of different obesity indicators with T2DM and to determine the optimal cut points for identifying T2DM. A total of 357 new cases of T2DM and 1352 individuals without diabetes were identified. The mean age of the study participants was 46.4 (sd 7.4) years and 62 % were men. Waist circumference (WC), waist:hip ratio (WHR), waist:height ratio (WHtR), BMI, body fat percentage and fat per square of height were found to be significantly higher ($P < 0.001$) among those with diabetes compared with individuals without diabetes. In addition, ROC for WHR (0.67; 95 % 0.59, 0.75), WHtR (0.66; 95 % 0.57, 0.75) and WC (0.64; 95 % 0.55, 0.73) were shown to better identify patients with T2DM. The proposed cut points with an optimal sensitivity and specificity for WHR, WHtR and WC were 0.96, 0.56 and 86 cm for men and 0.88, 0.54 and 83 cm for women, respectively. The present study has shown that WHR, WHtR and WC are better than other anthropometric measures for detecting T2DM in the Indian population. Their utility in clinical practice may better stratify at-risk patients in this population than BMI, which is widely used at present. Copyright © The Author(s) 2020.</p>				
305.	<p>Karthik, G., Iyadurai, R., Ralph, R., Prakash, V., Abhilash, K. P. P., Sathyendra, S., Abraham, O. C., Truman, C. and Reginald, A. Acute oleander poisoning: A study of clinical profile from a tertiary care center in South India</p>	NAT	JAN TO JUN	General Medicine, Emergency Medicine, Pharmacy	<p>PMID:32110579 PMC ID: PMC7014840 H-INDEX:NA IF: 0.210 RG (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>J Family Med Prim Care; 2020, 9 (1): 136-140</p> <p>Address: Department of General Medicine, Christian Medical College, Vellore, Tamil Nadu, India. Department of Emergency Medicine, Christian Medical College, Vellore, Tamil Nadu, India. Department of Pharmacy, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>INTRODUCTION: Yellow oleander (<i>Thevetia peruviana</i>), which belongs to the Apocyanaceae family, is a common shrub seen throughout the tropics. All parts of the plant contain high concentrations of cardiac glycosides which are toxic to cardiac muscle and the autonomic nervous system. Here, we describe the clinical profile of patients with oleander poisoning and their outcomes. METHODS AND MATERIALS: This retrospective study was conducted over a period of 12 months (March 2016 to February 2017). The data was extracted from the inpatient electronic medical records. Adult patients with a diagnosis of acute yellow oleander poisoning were included in the study. Descriptive statistics were obtained for all variables in the study and appropriate statistical tests were employed to ascertain their significance. RESULTS: The study comprised 30 patients aged 30.77 ± 12.31 (mean \pm SD) who presented at 12.29 ± 8.48 hours after consumption of yellow oleander. Vomiting (80%) was the most common presenting symptom. Metabolic abnormalities at presentation included hyperchloremia in 22 patients and metabolic acidosis (bicarbonate <24 mmol/L) in 29 patients. Fifteen (50%) patients had abnormal ECG, of which second-degree AV block was the commonest ECG abnormality seen in 4 (13.3%). Fifteen (50%) patients had transvenous temporary pacemaker insertion (TPI). Having a TPI significantly prolonged the duration of hospital stay (OR 1.85, 95% CI 1.06-3.21, P 0.03). The mortality in the cohort was 2 (6.7%). CONCLUSION: In patients with yellow oleander poisoning, dyselectrolytemia with ECG abnormalities was common. TPI prolonged the duration of hospital stay. Further studies are required to know the indication for and to ascertain the effect of temporary pacing on survival.</p>				
306.	<p>Karunakaran, P., Abraham, D., Devadas, G., Hussain, Z. and Kanakasabapathi, R. The Effect of Hypomagnesemia on Refractory Hypocalcemia after Total Thyroidectomy: A Single-Center Prospective Cohort Study Indian Journal of Endocrinology and Metabolism; 2020, 24 (6): 518-524 Address: Department of Endocrine Surgery, Madras Medical College, Tamilnadu Dr MGR Medical University, III Floor, Tower Block 1, Chennai, Tamilnadu, India Government Mohan Kumaramangalam Medical College, Salem, India Department of Endocrine Surgery, Christian Medical College, Vellore, India Institute of Pathology, Madras Medical College, Chennai, India Institute of Biochemistry, Madras Medical College, Rajiv Gandhi Government General Hospital, Chennai, India Background: Hypomagnesemia is known to impede hypocalcemia correction. This</p>	NAT	JUL TO DEC	Endocrine Surgery	SCOPUS

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>prospective observational study aimed to evaluate the impact of serum magnesium levels on the development of refractory hypocalcemia, which remains a concerning problem after total thyroidectomy (TT). Subjects and Methods: Consecutive subjects (n = 312; mean age = 38.4 [range: 13-83] years; M:F = 62:250) undergoing TT for benign or malignant thyroid diseases were evaluated for serum corrected-calcium (8.4-10.4 mg/dL), magnesium (1.7-2.4 mg/dL), intact parathormone (iPTH), and 25-hydroxycholecalciferol (25OHD) levels preoperatively, at 48-h and 6-month post-TT. Results: Postoperatively, 98 subjects (31.4%) exhibited transient hypocalcemia, 96 (30.8%) had hypomagnesemia, and 52 (16.7%) had refractory hypocalcemia. Preoperatively, 38 subjects (12.2%) had asymptomatic hypocalcemia and 77 (24.7%) had hypomagnesemia. In multivariate logistic regression analysis, independent risk factors of transient hypocalcemia were hyperthyroidism (odd's ratio [OR]: 5.6), 48-h iPTH (OR: 3.2), 48-h magnesium (OR: 2.7), preoperative 25OHD (OR: 0.96), and preoperative calcium (OR: 0.5; each P < 0.01). In receiver-operating characteristic analysis, percent calcium decline and 48-h magnesium reliably predicted transient hypocalcemia with a threshold of 10.5% and 1.9 mg/dL, respectively. Area under curve, sensitivity, and specificity were 0.822, 82.7%, and 72.9%; and 0.649 (each P < 0.001), 68.4%, and 63.1%, respectively. Conclusion: Serum magnesium below 1.9 mg/dL had 2.7 times higher odds of developing transient hypocalcemia post-TT. Hypomagnesemia and percent calcium decline >10.5% within 48-h post-TT are associated with refractory hypocalcemia, which necessitates correction of both the deficiencies for prompt resolution of symptoms. © 2020 Wolters Kluwer Medknow Publications. All rights reserved.</p>				
307.	<p>Karuppusami, R., Antonisami, B., Vasan, S. K., Gowri, M., Selliah, H. Y., Arulappan, G., Jebasingh, F., Thomas, N. and Paul, T. V. Association of serum 25-Hydroxy vitamin D with total and regional adiposity and cardiometabolic traits Plos One; 2020, 15 (12): e0243850 Address: Department of Biostatistics, Christian Medical College, Vellore, India. Oxford Centre for Diabetes, Endocrinology and Metabolism, Churchill Hospital, University of Oxford, Oxford, United Kingdom. Department of Clinical Biochemistry, Christian Medical College, Vellore, India. Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore, India. BACKGROUND: Lower serum 25-hydroxyvitamin D [25(OH)D] is associated with greater adiposity and adverse cardiometabolic risk profile. The evidence is inconsistent among South Asian Indians. We aimed to examine associations between 25(OH)D and cardiovascular (CVD) risk markers in a rural and urban cohort from South India. SUBJECTS/METHODS: In this cross sectional study, 373 individuals (men, n = 205) underwent detailed CVD risk marker assessment including anthropometry [body mass index (BMI), waist, (WC) and hip circumferences (HC)], body composition analysis using dual energy x-ray</p>	INT	JUL TO DEC	Biostatistics, Clinical Biochemistry, Endocrinology, Diabetes and Metabolism	<p>PMID: 33370344 PMC:7769464</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	absorptiometry (DXA), blood pressure and biochemical analysis (glucose, insulin and lipids). The distribution of CVD risk factors were compared across serum 25(OH)D levels, stratified as deficiency (<20 ng/ml), insufficiency (20 to 29 ng/ml) and normal (≥30 ng/ml) levels. Multiple regression analysis, adjusting for potential confounders, was used to study associations of 25(OH)D with adiposity and cardiometabolic traits. RESULTS: The mean and standard deviation (SD) of age, BMI and 25(OH)D levels were 41.4 (1.1) years, 25.5 (4.8) kg/m ² and 23.4 (10.4) ng/ml respectively. The prevalence of 25(OH)D deficiency was 39.9% in this cohort. Individuals in the 25(OH)D deficiency category had significantly higher mean (SD) BMI [26.6 (5.1) kg/m ²], waist circumference [89.9 (12.5) cm] and total fat mass [20.6 (7.9) kg] compared with the Vitamin D sufficient group [BMI: 24.0 (4.4); WC 84.7 (12.0); total fat mass: 15.2 (6.8)]. Significantly inverse associations were observed with DXA measured total and regional fat depots with 25(OH)D levels, while anthropometric indices of adiposity showed significant inverse association only in women. After adjusting for total fat mass, no significant associations were observed between 25(OH)D and the cardiometabolic traits. CONCLUSIONS: Our results confirm that lower 25(OH)D is independently associated with both total and regional adiposity, but not with cardiometabolic traits, in this population.				
308.	Kate, M. P., Verma, S. J., Arora, D., Sylaja, P., Padma, M., Bhatia, R., Khurana, D., Sharma, A., Ojha, P. K., Renjith, V., Kulkarni, G. B., Sadiq, M., Jabeen, S., Borah, N. C., Ray, B., Sharma, M. and Pandian, J. D. Systematic development of structured semi-interactive stroke prevention package for secondary stroke prevention Annals of Indian Academy of Neurology; 2020, 23 (5): 681-686 Address: [Kate, Mahesh Pundlik] Alberta Hlth Serv, Dept Clin Neurosci, Edmonton, AB, Canada. [Verma, Shweta Jain; Pandian, Jeyaraj Durai] Christian Med Coll & Hosp , Dept Neurol, Brown Rd, Ludhiana 141008, Punjab, India. [Arora, Deepti; Sylaja, Pn; Renjith, Vishnu] Sri Chitra Tirunal Inst Med Sci & Technol, Dept Neurol, Thiruvananthapuram, Kerala, India. [Padma, Mv; Bhatia, Rohit] All India Inst Med Sci, Dept Neurosci, New Delhi, India. [Khurana, Dheeraj] Post Grad Inst Med Educ & Res, Dept Neurol, Chandigarh, India. [Sharma, Arvind] Zydus Hosp, Dept Neurol, Ahmadabad, Gujarat, India. [Ojha, Pawan Kumar] Grant Govt Med Coll, Dept Neurol, Mumbai, Maharashtra, India. [Kulkarni, Girish Baburao] Natl Inst Mental Hlth & Neurosci, Dept Neurol, Bangalore, Karnataka, India. [Sadiq, Mohammad] Christian Med Coll & Hosp , Dept Neurol, Vellore, Tamil Nadu, India. [Jabeen, S.] Nizams Inst Med Sci, Dept Neurol, Hyderabad, Telangana, India. [Borah, N. C.] Guwahati Neurol Res Ctr, Dept Neurol, Dispur, Assam, India. [Ray, BimanKanti] Bangur Inst Neurosci, Dept Neurol, Kolkata, W Bengal, India. [Sharma, Meenakshi] Indian Council Med Res, Div Noncommunicable Dis, New Delhi, India. Pandian, JD (corresponding author), Christian Med Coll & Hosp , Dept Neurol, Brown Rd, Ludhiana 141008, Punjab, India. jeyarajpandian@hotmail.com	NAT	JUL TO DEC	Neurological Sciences	WOS:000608478300023

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Background: Lack of compliance to medication and uncontrolled risk factors are associated with increased risk of recurrent stroke and acute coronary syndrome in patients with recent stroke. Multimodal patient education may be a strategy to improve the compliance to medication and early adoption of nonpharmacological measures to reduce the vascular risk factor burden in patients with stroke. We thus aim to develop multilingual short messaging services (SMS), print, and audio-visual secondary stroke prevention patient education package. The efficacy of the package will be tested in a randomized control trial to prevent major cardiovascular and cerebrovascular events. Methods: In the formative stage, intervention materials (SMS, video, and workbook) were developed. In the acceptability stage, the package was independently assessed and modified by the stakeholders involved in the stroke patient care and local language experts. The modified stroke prevention package was tested for implementation issues (implementation stage). Results: Sixty-nine SMS, six videos, and workbook with 11 chapters with 15 activities were developed in English language with a mean +/- SD SMOG index of 9.1 +/- 0.4. A total of 355 stakeholders including patients (24.8%), caregivers (24.8%), doctors (10.4%), nurses (14.1%), local language experts (2.8%), physiotherapists (13.2%), and research coordinators (9.8%) participated in 10 acceptability stage meetings. The mean Patient Education Material Assessment Tool understandability score in all languages for SMS, video scripts, and workbook was 95.2 +/- 2.6%, 95.2 +/- 4.4%, and 95.3 +/- 3.6%, respectively. The patients [n = 20, mean age of 70.3 +/- 10.6 years and median interquartile range (IQR) baseline NIHSS 1 (0-3)] or the research coordinators (n = 2) noted no implementation issues at the end of 1 month. Conclusion: An implementable complex multilingual patient education material could be developed in a stepwise manner. The efficacy of the package to prevent major adverse cardiovascular events is being tested in the SPRINT INDIA study.</p>				
309.	<p>Katiyar, A., Chavla, B., Kumar, V. and Agarwal, H. How COVID-19 is modifying trauma care Br J Surg; 2020, 107 (11): e523 Address: Indian Army Doctor, Command Hospital, Udhampur, Jammu and Kashmir, India. War Surgeon, ICRC, India. Department of Trauma Surgery, CMC, Vellore, India. Trauma Surgeon, Department of Trauma Surgery, KGMU, Lucknow, India.</p>	INT	JUL TO DEC	Trauma Surgery	<p>PMID: 32822508 PMC:7461384</p>
310.	<p>Khan, N., Cheemadan, S., Saxena, H., Bammidi, S. and Jayandharan, G. Recombinant suicide gene delivery vectors manufactured in the presence of specific small RNA is therapeutic in a syngeneic model of T-cell lymphoma Cytotherapy; 2020, 22 (5): S184-S184 Address: [Khan, N.; Saxena, H.; Bammidi, S.; Jayandharan, G.] Indian Inst Technol Kanpur, Biol Sci & Bioengn, Kanpur, UP, India. [Cheemadan, S.; Jayandharan, G.] CMC Vellore, Hematol & Ctr Stem Cell Res, Vellore, TN, India.</p>	INT	JAN TO JUN	Clinical Hematology, Centre for Stem Cell Research	<p>WOS:000536174900422 H-INDEX:44 IF: 3.460 RESURCHIFY (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
311.	<p>Khan, N., Cheemadan, S., Saxena, H., Bammidi, S. and Jayandharan, G. R. MicroRNA-based recombinant AAV vector assembly improves efficiency of suicide gene transfer in a murine model of lymphoma Cancer Medicine; 2020, 9 (9): 3188-3201</p> <p>Address: [Khan, Nusrat; Saxena, Himanshi; Bammidi, Sridhar; Jayandharan, Giridhara R.] Indian Inst Technol, Dept Biol Sci & Bioengn, Kanpur 208016, UP, India. [Cheemadan, Sabna; Jayandharan, Giridhara R.] Christian Med Coll & Hosp, Ctr Stem Cell Res, Vellore, Tamil Nadu, India. [Jayandharan, Giridhara R.] Christian Med Coll & Hosp, Dept Hematol, Vellore, Tamil Nadu, India. Jayandharan, GR (reprint author), Indian Inst Technol, Dept Biol Sci & Bioengn, Kanpur 208016, UP, India. jayrao@iitk.ac.in</p> <p>Recent success in clinical trials with recombinant Adeno-associated virus (AAV)-based gene therapy has redirected efforts in optimizing AAV assembly and production, to improve its potency. We reasoned that inclusion of a small RNA during vector assembly, which specifically alters the phosphorylation status of the packaging cells may be beneficial. We thus employed microRNAs (miR-431, miR-636) identified by their ability to bind AAV genome and also dysregulate Mitogen-activated protein kinase (MAPK) signaling during vector production, by a global transcriptome study in producer cells. A modified vector assembly protocol incorporating a plasmid encoding these microRNAs was developed. AAV2 vectors packaged in the presence of microRNA demonstrated an improved gene transfer potency by 3.7-fold, in vitro. Furthermore, AAV6 serotype vectors encoding an inducible caspase 9 suicide gene, packaged in the presence of miR-636, showed a significant tumor regression (2.2-fold, P < .01) in a syngeneic murine model of T-cell lymphoma. Taken together, we have demonstrated a simple but effective microRNA-based approach to improve the assembly and potency of suicide gene therapy with AAV vectors.</p>	INT	JAN TO JUN	Centre for Stem Cell Research, Clinical Hematology	WOS:000516864000001 SCOPUS H-INDEX:81 IF: 4.297 BIOXBIO (2018/2019)
312.	<p>Kingsbury, B., Sam, D., Jeyasudha, R., Thomas, E., Rebekah, G. and Lionel, J. Ectopic pregnancies: Catch them early, treat them wisely! J Family Med Prim Care; 2020, 9 (9): 4911-4918</p> <p>Address: Department of Obstetrics and Gynaecology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>INTRODUCTION: Ectopic pregnancy (EP) is a common condition encountered in Obstetrics and Gynecology. Different management protocols are currently available for haemodynamically stable patients but definitive recommendations is yet to be established, especially in developing countries with limited resources. AIM: To determine the outcome of EP in patients who are haemodynamically stable and to evaluate the factors that would predict success of specific management</p>	NAT	JUL TO DEC	Obstetrics and Gynaecology, Biostatistics	PMID: 33209821 PMC:7652111

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>protocols in them. METHODOLOGY: Haemodynamically stable patients with HCG levels <1500 mIU/ml were recruited for expectant management, 1500-5000 mIU/ml were given MTX and those with >5000 mIU/ml were managed surgically. RESULTS: The overall success rate for expectant management was 92.7% and that with MTX was 80%. Baseline HCG values was found to be the only significant factor for predictor of success of treatment in the expectant group (P 0.05). The size of mass seen on USG did not have a significant correlation with beta HCG values (P 0.257). CONCLUSION: Of all the predictors for success of treatment that have been studied, the initial HCG value alone remains of paramount importance. Women with initial values of HCG <1500 mIU/ml can be offered expectant management, with a much better assurance of success for those with values <1000 mIU/ml. Those with values <5000 mIU/ml can be given MTX, with single dose being sufficient most often for <3000 mIU/ml. The presence of fluid restricted to the pelvis on USG can be managed non-surgically. One should not opt for surgical management only on the basis of size of the adnexal mass on USG.</p>				
313.	<p>Kingsley, S., Chacko, M. P., Amal, P., Rebekah, G., Leni, G. M. and Dolly, D. Frequency of Platelet Crossmatch Positivity and Predictive Value for Poor Platelet Increment Among Paediatric Oncohaematology Patients in India Indian J Hematol Blood Transfus; 2020, 36 (1): 164-170</p> <p>Address: 1Department of Transfusion Medicine and Immunohaematology, Christian Medical College, Vellore, Tamil Nadu 632004 India. GRID: grid.11586.3b. ISNI: 0000 0004 1767 8969 2Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu 632004 India. GRID: grid.11586.3b. ISNI: 0000 0004 1767 8969 3Department of Paediatrics, Christian Medical College, Vellore, Tamil Nadu 632004 India. GRID: grid.11586.3b. ISNI: 0000 0004 1767 8969</p> <p>Immune platelet destruction is a significant cause for platelet refractoriness. The platelet crossmatch-a solid phase red cell adherence assay utilizes donor platelets and patient serum to assess compatibility and appears to be a feasible option in resource constrained settings. This study was done to evaluate the frequency of platelet crossmatch positivity among Paediatric Oncohaematology patients and also to assess whether a positive crossmatch is predictive of unsuccessful platelet transfusions in this group of patients. Paediatric Oncohaematology patients who received platelet transfusions between March 2013 and September 2013 were included in the study. The pre-transfusion patient sample and a segment from the transfused donor unit were used for performing the platelet crossmatch. A blood sample was collected one hour after the transfusion to assess post-transfusion platelet count. Corrected count increment (CCI) was calculated using the standard formula. $CCI \leq 7500/\mu L/m(2)/10(11)$ was considered evidence of an unsuccessful transfusion. Seventy-three platelet crossmatches were performed for 69 patients, of which 30 patient samples (41%) showed crossmatch positivity. 25 (89.2%) of</p>	NAT	JAN TO JUN	Transfusion Medicine and Immunohaematology, Biostatistics, Paediatrics	<p>PMID:32174695 PMC ID: PMC7042467 WOS:000515630900024 SCOPUS H-INDEX:15 IF: 0.869 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	28 unsuccessful transfusions showed crossmatch positivity, and 40 (88.9%) of 45 successful transfusions showed negative crossmatches (p = 0.03). Crossmatch positivity among transfusion dependent Paediatric Oncohaematology patients was as high as 42%, when ABO matched platelet units were allocated without further testing. Our results indicate that this test may be a reliable tool to select compatible platelet units and an effective intervention in the management of patients at risk of immune platelet refractoriness.				
314.	Kinyoki, D. K., Ross, J. M., Lazzar-Atwood, A., Munro, S. B., Schaeffer, L. E., Abbasalizad-Farhangi, M., Abbasi, M., Abbastabar, H., Abdelalim, A., Abdoli, A., Abdollahi, M., Abdollahpour, I., Abdulkader, R. S., Abebe, N. D., Abebo, T. A., Abegaz, K. H., Abolhassani, H., Abreu, L. G., Abrigo, M. R. M., Abushouk, A. I., Accrombessi, M. M. K., Acharya, D., Adabi, M., Adebiyi, A. O., Adedeji, I. A., Adekanmbi, V., Adeoye, A. M., Adetokunboh, O. O., Adham, D., Aduroja, P. E., Advani, S. M., Afarideh, M., Aghaali, M., Agrawal, A., Ahmad, T., Ahmadi, K., Ahmadi, S., Ahmed, M. B., Ahmed, R., Ajumobi, O., Akal, C. G., Akalu, T. Y., Akinyemiju, T., Akombi, B., Al-Aly, Z., Alam, S., Alamene, G. M., Alanzi, T. M., Rabanal, J. E. A., Alema, N. M., Ali, B. A., Ali, M., Alijanzadeh, M., Alinia, C., Alipour, V., Alizade, H., Aljunid, S. M., Almasi, A., Almasi-Hashiani, A., Al-Mekhlafi, H. M., Al-Raddadi, R. M., Altirkawi, K., Alvis-Guzman, N., Alvis-Zakzuk, N. J., Amare, A. T., Amegah, A. K., Amini, S., Rarani, M. A., Amiri, F., Amit, A. M. L., Anber, N. H., Andrei, C. L., Ansari, F., Ansari-Moghaddam, A., Anteneh, Z. A., Antonio, C. A. T., Antriyandarti, E., Anvari, D., Anwer, R., Appiah, S. C. Y., Arabloo, J., Arab-Zozani, M., Araya, E. M., Arefi, Z., Aremu, O., Årnlöv, J., Arzani, A., Asadi-Aliabadi, M., Asadi-Pooya, A. A., Asgari, S., Asghari, B., Ashaghe, A. F., Asrat, A. A., Ataeinia, B., Atalay, H. T., Atnafu, D. D., Atout, M. M. W., Ausloos, M., Avokpaho, E. F. G. A., Awasthi, A., Quintanilla, B. P. A., Ayanore, M. A., Aynalem, Y. A. A., Azadmehr, A., Azari, S., Azarian, G., Azene, Z. N., Babae, E., Badawi, A., Badiye, A. D., Bahrami, M. A., Baig, A. A. A., Bakhtiari, A., Bakkannavar, S. M., Balakrishnan, S., Bali, A. G., Banach, M., Banik, P. C., Baradaran-Seyed, Z., Baraki, A. G., Barboza, M. A., Bärnighausen, T. W., Barua, L., Basaleem, H., Basu, S., Bayati, M., Bayih, M. T., Baynes, H. W., Bedi, N., Behzadifar, M., Behzadifar, M., Bekele, Y. A., Bennett, D. A., Berbada, D. A., Berhe, K., Berhe, A. K., Berman, A. E., Bernstein, R. S., Bhageerathy, R., Bhandari, D., Bharadwaj, P., Bhattacharjee, N. V., Bhattacharyya, K., Bijani, A., Bikbov, B., Bilano, V., Billign, N., Sayeed, M. S. B., Birara, S., Birhane, M. B. B., Birhanu, M., Biswas, R. K., Bitew, Z. W., Bogale, K. A., Bohlouli, S., Bolla, S. R., Boloor, A., Borzi, A. M., Borzouei, S., Brady, O. J., Bragazzi, N. L., Braithwaite, D., Briko, N. I., Britton, G., Budhathoki, S. S., Nagaraja, S. B., Busse, R., Butt, Z. A., Cahuana-Hurtado, L., Cámera, L. A., Campos-Nonato, I. R., Cano, J., Car, J., Cárdenas, R., Carrero, J. J., Carvalho, F., Castaldelli-Maia, J. M., Castañeda-Orjuela, C. A., Castro, F., Cerin, E., Chansa, C., Charan, J., Chatterjee, P., Chattu, V. K., Chauhan, B. G., Chavshin, A. R., Chehrizi, M., Chichiabellu, T. Y., Chin, K. L., Christopher, D. J., Chu, D. T., Cicuttini, F. M., Collison, M. L., Cork, M. A., Cormier, N., Cortesi, P. A., Costa, V. M., Dadi, A. F. F., Dagneu, B., Dahlawi, S. M. A., Damiani, G., Darwish, A. H., Daryani, A., Das, J. K., Gupta, R. D., Dávila-Cervantes, C., Davis Weaver, N., Leo, D. D., Neve, J. W. D.,	INT	JAN TO JUN	Endocrinology	SCOPUS H-INDEX:524 IF: 30.641 BIOXBIO (2018/2019)

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	<p>Demeke, F. M., Demis, A. B., Demissie, D. B., Demoz, G. T., Denova-Gutiérrez, E., Deribe, K., Desai, R., Desalegn, B. B., Desalew, A., Deshpande, A., Dey, S., Dharmaratne, S. D., Dhillon, P., Dhimal, M., Dhungana, G. P., Nasab, M. D., Diaz, D., Forooshani, Z. S. D., Dinsa, G. D., Dipeolu, I. O., Djalalinia, S., Do, H. T., Do, H. P., Doku, P. N., Dorostkar, F., Doshmangir, L., Dubey, M., Adema, B. D., Dunachie, S. J., Duncan, B. B., Durães, A. R., Earl, L., Leylabadlo, H. E., Eftekhari, A., El Sayed, I., El Sayed Zaki, M., El Tantawi, M., Elbarazi, I., Elemineh, D. A., El-Jaafary, S. I., El-Khatib, Z., Elsharkawy, A., El-Sherbiny, Y. M., Elyazar, I. R. F., Emamian, M. H., Enany, S., Endalew, D. A., Endalifer, M. L., Eskandari, K., Eskandarieh, S., Esmaeilnejad, S., Esteghamati, A., Etemadi, A., Etisso, A. E., Fanzo, J., Farahmand, M., Faraj, A., Farashi, S., Fareed, M., Farioli, A., Faro, A., Farzadfar, F., Farzam, H., Fatima, S. S., Fattahi, N., Fauk, N. K., Fazaeli, A. A., Fentahun, N., Ferede, T. Y., Fereshtehnejad, S. M., Fernandes, E., Fernandes, J. C., Feyissa, G. T., Filip, I., Fischer, F., Flohr, C., Foigt, N. A., Folayan, M. O., Fomenkov, A. A., Foroutan, M., Förster, J., Francis, J. M., Fukumoto, T., Gayesa, R. T., Geberemariam, B. S., Gebrehiwot, T. T., Gebremariam, H., Gebremariam, K. T., Gebremedhin, K. B. B., Gebremeskel, G. G., Gebresslassie, A. A. A., Gebretsadik, G. G. G., Gedefaw, G. A., Geramo, Y. C. D., Gesesew, H. A., Geta, B., Getenet, A. B., Gezae, K. E., Ghaffarifard, F., Ghafourifard, M., Ghajar, A., Ghajarzadeh, M., Ghashghaee, A., Ghiasvand, H., Gholamian, A., Gilani, S. A., Gill, T. K., Ginawi, I. A., Goli, S., Gomes, N. G. M., Gopalani, S. V., Goudarzi, H., Goulart, A. C., Govindakarnavar, A., Grada, A., Grivna, M., Guimarães, R. A., Guled, R. A., Guo, Y., Gupta, R., Gupta, R., Hafezi-Nejad, N., Haile, M. T., Haj-Mirzaian, A., Haj-Mirzaian, A., Hall, B. J., Halvaei, I., Hamadeh, R. R., Hamidi, Y., Handiso, D. W., Hankey, G. J., Haririan, H., Hariyani, N., Hasaballah, A. I., Hasan, M. M., Hasankhani, M., Hasanpoor, E., Hasanzadeh, A., Hashemian, M., Hassanipour, S., Hassen, H. Y., Havmoeller, R., Hawkes, C., Hayat, K., Hayelom, D. H., Heidari, B., Heidari-Soureshjani, R., Hendrie, D., Henok, A., Henry, N. J., Herrero, M., Herteliu, C., Heydarpour, F., De Hidru, H. D., Hoang, C. L., Hoek, H. W., Hole, M. K., Holla, R., Hollerich, G., Rad, E. H., Hong, S. H., Hoogar, P., Horino, M., Hossain, N., Hosseini, M., Hosseinzadeh, M., Hostiuc, M., Hostiuc, S., Housseh, M., Hsairi, M., Hu, G., Huda, T. M., Humayun, A., Hwang, B. F., Ibitoye, S. E., Ilesanmi, O. S., Ilic, M. D., Imani-Nasab, M. H., Inbaraj, L. R., Iqbal, U., Irvani, S. S. N., Islam, S. M. S., Iwu, C. C. D., Iwu, C. J., Izadi, N., Jaafari, J., Jaga, A., Jadidi-Niaragh, F., Balalami, N. J., Jafarinia, M., Jahani, M. A., Jakovljevic, M., Jalali, A., Jalilian, F., Jayatilleke, A. U., Jeemon, P., Jehan, F., Jenabi, E., Jha, R. P., Jha, V., Ji, J. S., Jia, P., John, O., John-Akinola, Y. O., Johnson, K. B., Jonas, J. B., Joseph, N., Joukar, F., Jozwiak, J. J., Jungari, S. B., Jürisson, M., Kabir, A., Kabir, Z., Kahsay, A., Kahssay, M., Kalani, H., Kalankesh, L. L., Kalhor, R., Kamiab, Z., Kanchan, T., Kapil, U., Kapoor, N., Karami, M., Matin, B. K., Karch, A., Karim, M. A., Karki, S., Kasaeian, A., Kasahun, G. G., Kasaye, H. K., Kassa, T. D., Kassaye, H. G., Kassebaum, N. J., Karyani, A. K., Kengne, A. P., Ketema, D. B., Khader, Y. S., Khafaie, M. A., Khaksarian, M., Khalid, N., Khalil, I. A., Khalilov, R., Khan, A., Khan, E. A., Khan, M. N., Khan, M. S., Khan, M. S., Khatab, K., Khater, A., Khater, M. M., Khatib, M. N., Khayamzadeh, M., Khazaei-Pool, M., Khazaei, M., Khazaei, S., Khodayari, M. T., Khosravi, M. H., Khundkar, R., Kiadaliri, A., Kianipour, N., Kiirithio, D. N., Kim, Y. J., Kimokoti, R. W., Kisa, A., Kisa, S., Kolola, T., Komaki, H., Kondlahalli,</p>				

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	<p>S. K. M., Koolivand, A., Koul, P. A., Koyanagi, A., Kraemer, M. U. G., Krishan, K., Krohn, K. J., Kugbey, N., Kumar, M., Kumar, P., Kumar, V., Kurmi, O. P., Kuti, O., Vecchia, C. L., Lacey, B., Lad, D. P., Lal, A., Lal, D. K., Lami, F. H., Lamichhane, P., Lang, J. J., Lansingh, V. C., Lasrado, S., Lebedev, G., Lee, P. H., Lee, S. W. H., Leili, M., Letourneau, I. D., Lewycka, S., Li, S., Lim, L. L., Linn, S., Liu, S., Liu, S., Lodha, R., Longbottom, J., Lopez, J. C. F., Lorkowski, S., Macarayan, E. R. K., Madadin, M., El Razek, H. M. A., El Razek, M. M. A., Maghavani, D. P., Mahasha, P. W., Mahotra, N. B., Maled, V., Maleki, A., Maleki, S., Malta, D. C., Manafi, A., Manafi, F., Manafi, N., Manohar, N. D., Mansour-Ghanaei, F., Mansouri, B., Mansournia, M. A., Mapoma, C. C., Marami, D., Marczak, L. B., Arnedo, C. A. M., Martins-Melo, F. R., Masaka, A., Massenburg, B. B., Maulik, P. K., Mayala, B. K., Mazidi, M., Mehndiratta, M. M., Mehri, F., Mehta, K. M., Meitei, W. B., Mekonnen, F. A., Mekonnen, T., Meles, G. G., Meles, H. G., Melese, A., Mendoza, W., Menezes, R. G., Mengesha, M. B., Mensah, G. A., Meretoja, T. J., Miazgowski, T., Kostova, N. M., Miller, T. R., Mills, E. J., Mini, G. K., Mir, S. M., Miri, M., Mirjalali, H., Mirrakhimov, E. M., Mirzaei, H., Mirzaei, M., Mirzaei, R., Mirzaei-Alavijeh, M., Mithra, P., Moazen, B., Mohamadi, E., Mohamadi-Bolbanabad, A., Mohammad, K. A., Mohammad, Y., Mohammad, D. K., Darwesh, A. M., Mezerji, N. M. G., Mohammadian-Hafshejani, A., Mohammadnia-Afrouzi, M., Mohammadoo-Khorasani, M., Mohammadpourhodki, R., Mohammed, S., Mohammed, S., Mohammed, J. A., Mohammed, A. S., Mohebi, F., Mokari, A., Mokdad, A. H., Montañez, J. C., Montero-Zamora, P. A., Moodley, Y., Moossavi, M., Moradi, G., Moradi, M., Moradi, Y., Moradi-Joo, M., Moradi-Lakeh, M., Moradpour, F., Moradzadeh, R., Moraga, P., Morrison, S. D., Mosapour, A., Mosser, J. F., Mouodi, S., Khaneghah, A. M., Mozaffarian, D., Mueller, U. O., Murray, C. J. L., Murthy, G. V. S., Musa, K. I., Mustafa, G., Muthupandian, S., Nabavizadeh, B., Naderi, M., Nadkarni, G. N., Nagarajan, A. J., Naghavi, M., Naheed, A., Naik, G., Najafi, F., Nansseu, J. R., Narayan, K. M. V., Nascimento, B. R., Nayak, V., Nazari, J., Ndwandwe, D. E., Negoï, I., Negoï, R. I., Ngunjiri, J. W., Nguyen, C. T., Nguyen, H. L. T., Nigatu, D., Nigatu, Y. T., Nikbakhsh, R., Ningrum, D. N. A., Nnaji, C. A., Nong, V. M., Noubiap, J. J., Nowak, C., Oancea, B., Ofori-Asenso, R., Oghenetega, O. B., Oh, I. H., Oladimeji, O., Oladnabi, M., Olagunju, A. T., Olagunju, T. O., Olusanya, B. O., Olusanya, J. O., Oluwasanu, M. M., Omer, M. O., Onwujekwe, O. E., Asante, K. O., Oren, E., Orisakwe, O. E., Ortiz, A., Osarenotor, O., Osgood-Zimmerman, A. E., Owolabi, M. O., P. A. M., Padubidri, J. R., Pakshir, K., Pana, A., Panda-Jonas, S., Parsian, H., Pashaei, T., Pasupula, D. K., Patel, S. K., Pathak, A., Pathak, M., Pati, S., Patle, A., Patton, G. C., Paulos, K., Toroudi, H. P., Pepito, V. C. F., Perico, N., Petri, W. A., Pickering, B. V., Pigott, D. M., Pirestani, M., Piroozi, B., Pirsahab, M., Pokhrel, K. N., Postma, M. J., Pourjafar, H., Pourmalek, F., Kalhori, R. P., Pourshams, A., Poustchi, H., Prada, S. I., Preotescu, L., Pribadi, D. R. A., Syed, Z. Q., Rabiee, M., Rabiee, N., Radfar, A., Rafiei, A., Rahim, F., Rahimi-Movaghar, V., Rahman, M. A., Rahman, S., Rai, R. K., Rajabpour-Sanati, A., Rajati, F., Ramezanzadeh, K., Rana, S. M., Ranabhat, C. L., Rao, S. J., Rasella, D., Rashedi, V., Rastogi, P., Rathi, P., Rawaf, S., Rawaf, D. L., Rawal, L., Ray, S. E., Remuzzi, G., Renjith, V., Renzaho, A. M. N., Resnikoff, S., Rezaei, N., Rezaeian, S., Rezai, M. S., Rezapour, A., Riahi, S. M., Ribeiro, A. I., Rickard, J., Rodriguez, A., Roeber, L., Roro, E. M., Roshandel, G., Rostami, A., Rubagotti, E., Saad,</p>				

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	<p>A. M., Saadatagah, S., Sabde, Y. D., Sabour, S., Sadeghi, E., Sadeghi, M., Safari, S., Safari, Y., Safarpour, H., Sagar, R., Sahebkar, A., Sahraian, M. A., Sajadi, S. M., Salahshoor, M. R., Salam, N., Salehi, F., Zahabi, S. S., Salem, H., Salem, M. R. R., Salimi, Y., Salimzadeh, H., Kafil, H. S., Sambala, E. Z., Samy, A. M., Santos, I. S., Jose, B. P. S., Saraswathy, S. Y. I., Sarker, A. R., Sartorius, B., Sarveazad, A., Sathian, B., Satpathy, M., Saxena, S., Sayyah, M., Sbarra, A. N., Schipp, M. F., Schmidt, M. I., Schutte, A. E., Schwebel, D. C., Senbeta, A. M., Senthilkumaran, S., Seyedmousavi, S., Shaahmadi, F., Shafaat, O., Shahabi, S., Shaikh, M. A., Shalash, A. S., Shams-Beyranvand, M., Shamshirian, A., Shamsizadeh, M., Shannawaz, M., Sharafi, K., Sharif, M., Sharma, R., Shehata, H. S., Sheikhtaheri, A., Shibuya, K., Shiferaw, W. S., Shigematsu, M., Shin, J. I., Shiri, R., Shirkoohi, R., Shiue, I., Shuval, K., Siabani, S., Siddiqi, T. J., Sigfusdottir, I. D., Silva, D. A. S., Simonetti, B., Singh, A., Singh, P., Singh, V., Singh, J. A., Singh, P. K., Sinha, D. N., Sintayehu, Y., Sisay, M. M. M., Soheili, A., Soleymani, B., Soltani, F., Soltani, S., Soriano, J. B., Sorrie, M. B., Soshnikov, S., Soyiri, I. N., Spotin, A., Sreeramareddy, C. T., Srivastava, R. K. K., Starodubova, A., Sudaryanto, A., Sufiyan, M. B., Suleria, H. A. R., Sulo, G., Sunguya, B. F., Sykes, B. L., Tabarés-Seisdedos, R., Tabuchi, T., Tadesse, B. T., Taherkhani, A., Tamirat, K. S., Tassew, S. G., Taveira, N., Teklehaimanot, B. F., Tekulu, G. H., Temsah, M. H., Terkawi, A. S., Tessema, Z. T., Thomas, N., Titova, M. V., Tlaye, K. G., Tohidinik, H. R., Tonelli, M., Tovani-Palone, M. R., Traini, E., Tran, K. B., Tripathi, M., Uddin, R., Ullah, I., Unnikrishnan, B., Upadhyay, E., Useh, U., Usman, M. S., Uthman, O. A., Vacante, M., Vaezghasemi, M., Valdez, P. R., Vanderheide, J., Varavikova, E., Varughese, S., Vasankari, T. J., Vasseghian, Y., Veisani, Y., Venkatesh, S., Venketasubramanian, N., Verma, M., Vidale, S., Violante, F. S., Vlassov, V., Vollmer, S., Vukovic, R., Waheed, Y., Wang, H., Wang, Y., Wang, Y. P., Weldesamuel, G. T., Werdecker, A., Wiangkham, T., Wiens, K. E., Wijeratne, T., Wolde, H. F., Wondafrash, D. Z., Wonde, T. E., Wondmieneh, A. B., Wu, A. M., Xu, G., Yadegar, A., Yadollahpour, A., Jabbari, S. H. Y., Yamada, T., Yano, Y., Yaya, S., Yazdi-Feyzabadi, V., Yeshaneh, A., Yeshaw, Y., Yeshitila, Y. G., Yilma, M. T., Yip, P., Yonemoto, N., Yoon, S. J., Youm, Y., Younis, M. Z., Yousefi, Z., Yousof, H. A. S. A., Yu, C., Yusefzadeh, H., Moghadam, T. Z., Zaki, L., Zaman, S. B., Zamani, M., Zamanian, M., Zandian, H., Zarafshan, H., Zepro, N. B., Zerfu, T. A., Zewale, T. A., Zhang, Y., Zhang, Z. J., Zhao, X. J., Zodpey, S., Zomorodian, K., Zotor, F. B., Afshin, A., Hay, S. I. and Collaborators, L. B. D. Double Burden of Malnutrition</p> <p>Mapping local patterns of childhood overweight and wasting in low- and middle-income countries between 2000 and 2017</p> <p>Nature Medicine; 2020, 26 (5): 750-759</p> <p>Address: Department of Health Metrics Sciences, School of Medicine, University of Washington, Seattle, WA, United States Department of Global Health, University of Washington, Seattle, WA, United States Department of Medicine, University of Washington, Seattle, WA, United States School of Nutrition and Food Sciences, Tabriz University of Medical Sciences, Tabriz, Iran Kermanshah University of Medical Sciences, Kermanshah, Iran Advanced Diagnostic and Interventional Radiology Research Center, Tehran</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
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315.	<p>Koller, T., Muhlebach, J., Livingston, A., Boopalan, Prjvc and Iselin, L. D. The Poller Screw Technique: A Method of Fine-Tuning the Reduction in Locked Nailing Journal of Foot & Ankle Surgery; 2020, 59 (3): 638-640</p> <p>Address: Registrar, Department of Orthopaedics, Spital Thun, Thun, Switzerland. Consultant, Department of Orthopaedic Surgery and Traumatology, Kantonsspital Luzern, Lucerne, Switzerland. Assistant Professor, Department of Orthopaedics unit III, Christian Medical College, Vellore, Tamilnadu, India. Professor, Department of Orthopaedics unit III, Christian Medical College,</p>	INT	JAN TO JUN	Orthopaedics Unit III	<p>PMID:32354521 WOS:000531559100008 SCOPUS H-INDEX:62 IF: 1.014 BIOXBIO (2018/2019)</p>

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	<p>Vellore, Tamilnadu, India. Consultant, Department of Orthopaedic Surgery and Traumatology, Kantonsspital Luzern, Lucerne, Switzerland. Electronic Address: lukas.iselin@luks.ch.</p> <p>Intramedullary nailing is the treatment of choice for diaphyseal fractures in long bones. However, nailing of long bone fractures at the metaphyseodiaphyseal junction is technically difficult and can cause malalignment because of the mismatch in the diameter of the bone. One of the most common and recently described methods of correcting deformity during nailing is the poller screw technique. We describe a modified technique to correct malreduced fractures with the nail in situ, which we have used successfully in 3 patients. (C) 2019 by the American College of Foot and Ankle Surgeons. All rights reserved.</p>				
316.	<p>Koltsova, E. M., Kuprash, A. D., Dashkevich, N. M., Vardanyan, D. M., Chernyakov, A. V., Kumsikova, M. A., Nair, S. C., Srivastava, A., Ataullakhanov, F. I., Pantelev, M. A. and Balandina, A. N.</p> <p>Determination of fibrin clot growth and spatial thrombin propagation in the presence of different types of phospholipid surfaces Platelets; 2020, 1-7</p> <p>Address: Department of Biophysics and System Biology, National Research Center of Pediatric Hematology, Oncology and Immunology, Moscow, Russia. Center for Theoretical Problems of Physicochemical Pharmacology RAS, Moscow, Russia. City Clinical Hospital No. 15 Named O.M. Filatov, Moscow, Russia. Department of Haematology, Christian Medical College, Vellore, India.</p> <p>In this work, we present a new method-Thrombodynamics-4D-for the assessment of both plasma and platelet contributions to clotting. Thrombodynamics-4D potentially allows for the determination of plasma or platelet disorders and the effects of various drugs on plasma clotting or on platelet procoagulant function. In this assay, clot formation in platelet-rich plasma or platelet-free plasma supplemented with phospholipids is activated with tissue factor immobilized on a surface. Spatial fibrin clot growth and thrombin concentration dynamics are registered by measuring light scattering of the fibrin clot and fluorescence of the product formed by cleavage of the synthetic fluorogenic substrate by thrombin, respectively. Here, we describe the preanalytical requirements, measurement methodology and calculation principles of assay parameters. Preanalytical and analytical variability and reference ranges of the assay are given. Additionally, we show some clinical examples, which determine the effect of anticoagulants, measure clotting dysfunction in patients with platelet or coagulation disorders and evaluate the effect of surgery.</p>	INT	JUL TO DEC	Haematology	PMID: 32967497
317.	<p>Kongjam, P., Jeyaseelan, L., Chaijaroenkul, W. and Na-Bangchang, K.</p> <p>Systematic Analysis of the Application and Inappropriate Use/Misuse of Statistics in Cholangiocarcinoma Research in Southeast Asia Asian Pac J Cancer Prev; 2020, 21 (2): 275-280</p>	INT	JAN TO JUN	Biostatistics	PMID:32102499 SCOPUS H-INDEX:70 IF: 1.490 RG (2018/2019)

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	<p>Address: Chulabhorn International College of Medicine, Thammasat University, Paholyothin Road, Klongluang, Pathumthani Thailand. Department of Biostatistics, Christian Medical College, Vellore-632 002, India.</p> <p>OBJECTIVE: The aim of the study was to perform a systematic review of research articles related to cholangiocarcinoma (CCA), the bile duct cancer in Southeast Asian (SEA) countries published during 2010-2015 including analysis of inappropriate use/misuse of statistics. METHODS: Research articles were retrieved from the PubMed database using different 'keywords' for seven research disciplines/categories in biomedical sciences (medicine/physiology, epidemiology, immunology, pharmacology and toxicology, diagnosis/diagnostics, drug resistance, and biochemistry). RESULTS: A total of 353 articles were finally included in the analysis based on the pre-defined eligibility criteria. Most were articles of which the studies were conducted in Thailand (335 articles, 94.90%). Disease diagnosis/diagnostics (n=266, 75.35%), biochemistry (n =223, 63.17%), and pharmacology and toxicology (n =218, 61.76%) were the three main research disciplines/categories for CAA conducted in SEA countries during 2010-2015. Thailand was the country which most published CCA-related research articles in all disciplines/categories. Drug resistance was the research category that most applied both descriptive and inferential statistics (100%). The student's t-test was the most applied test (35.13%). Inappropriate use/misuse of statistics in all types was highest in diagnosis/diagnostics (73.59%) and pharmacology and toxicology (73.06%) research disciplines/categories and was lowest in medicine/pathophysiology (0.26%). Inappropriate use/misuse in almost all types (seven types) was found in the diagnosis/diagnostics category. CONCLUSION: Results of the systematic analysis of CCA-related research articles published from the ten SEA countries during 2010-2015 reveal high rates of inappropriate use/misuse of statistics. The readers should be aware of the reliability of the articles and the possibility of wrong interpretation and conclusion of these articles.</p>				
318.	<p>Koroth, R. C., Sebastian, A., Sathyamurthy, A., Thomas, A., Ram, T. S. and Peedicayil, A. Metastasis of Cervical Cancer to the Abdominal Wall Indian Journal of Gynecologic Oncology; 2020, 18 (2): Address: Department of Gynaecologic Oncology, Christian Medical College, Vellore, 632004, India Department of Radiation Oncology, Christian Medical College, Vellore, 632004, India</p> <p>Introduction: Cutaneous metastasis from cervical cancer is rare. We report four consecutive cases of abdominal wall metastasis after patients had inappropriate surgery for cervical cancer. Methods: Between January 2015 and September 2019, we encountered 34 cases of recurrent cervical cancer. The demographic, clinical</p>	NAT	JAN TO JUN	Gynaecologic Oncology, Radiation Oncology	SCOPUS H-INDEX:2 IF: 1.605 BIOXBIO (2018/2019)

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	and treatment details of 4 patients with abdominal wall metastasis were obtained from electronic medical records. Results: All four patients had had simple hysterectomy for cervical cancer elsewhere and presented with abdominal wall metastasis. All patients had squamous cell carcinoma. The duration between primary treatment and recurrence ranged between 6 and 18 months. The four patients were treated with either surgical excision or chemotherapy and radiation therapy. All patients were alive at the time of reporting. Conclusion: If the recurrence is limited to the anterior abdominal wall, wide local excision with repair is possible. When abdominal wall metastasis is associated with pelvic recurrence in patients who were not given radiation initially, they can be offered chemoradiation with curative intent. Individualized treatment by a multidisciplinary team can give the patient the best chances at survival and the best quality of life. © 2020, Association of Gynecologic Oncologists of India.				
319.	<p>Korula, A., Devasia, A. J., Kulkarni, U., Abubacker, F. N., Lakshmi, K. M., Abraham, A., Srivastava, A., George, B. and Mathews, V. Impact of imaging modality on clinical outcome in Hodgkin lymphoma in a resource constraint setting British Journal of Haematology; 2020, 188 (6): 930-934</p> <p>Address: Department of Haematology, Christian Medical College, Vellore, India</p> <p>Treatment of Hodgkin lymphoma (HL) has evolved with risk-stratified therapy based on PET-CT scan at multiple timepoints. In a resource constraint setting even a single PET-CT scan (\$400) is inaccessible to many patients, who are re-assessed with only clinical examination, abdominal ultrasonogram and/or x-ray (C/U/X) (\$10). To compare clinical outcomes in patients with HL who have had suboptimal imaging after completion of chemotherapy for HL, with those who had a CT or PET-CT, 283 patients were treated for HL from 2011 to 2015, and 268 patients completed six cycles of ABVD therapy with response assessment modality by CT/PET in 185 patients and by C/U/X in 83. There was no difference in the number of patients with advanced (64.1% vs. 61.1%; P = 0.650) or bulk disease (8.1% vs. 7.2%). A significantly higher number of patients in the CT/PET group received IFRT (25.4% vs. 7.7%; P = 0.0005). The three-year overall survival and progression-free survival of all treated patients (n = 283) was 83.5 ± 2.3% and 76.7 ± 2.6% respectively [median follow-up 36 months (range 2-93)]. At three years, the overall relapse-free survival (RFS) was 80.1 ± 2.5%, with RFS of 77 ± 3.2% vs. 85 ± 4.0% in the CT/PET group and C/U/X groups respectively (P = 0.349). There was no difference in RFS between the two groups either in early-stage disease (88.1 ± 4.6% vs. 91.8 ± 5.6%; P = 0.671) or late-stage disease (73.9 ± 4.8% vs. 81.3 ± 6.0%; P = 0.747). The only significant factor adversely affecting RFS was advanced disease (P = 0.004). Factors not affecting RFS were age (P = 0.763), sex (P = 0.925), bulk disease (P = 0.889) and imaging modality (P = 0.352). There was no difference in relapse rates between patients who had</p>	INT	JAN TO JUN	Clinical Haematology	<p>SCOPUS H-INDEX:2 IF: 1.700 RG (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	suboptimal imaging compared to those who had a PET/CT. It is possible to use these basic imaging modalities when resources are a constraint, with acceptable outcomes. © 2019 British Society for Haematology and John Wiley & Sons Ltd				
320.	<p>Korula, A., Perumalla, S., Devasia, A. J., Abubacker, F. N., Lakshmi, K. M., Abraham, A., Mathews, V., Srivastava, A., Anandan, S., Veeraraghavan, B. and George, B. Drug-resistant organisms are common in fecal surveillance cultures, predict bacteremia and correlate with poorer outcomes in patients undergoing allogeneic stem cell transplants Transpl Infect Dis; 2020, 22 (3): e13273</p> <p>Address: Department of Haematology, Christian Medical College and Hospital, Vellore, India. Microbiology, Christian Medical College and Hospital, Vellore, India.</p> <p>BACKGROUND: With the increasing incidence of multidrug-resistant (MDR) organisms and high mortality rates associated with these infections, we describe the spectrum of the major drug-resistant pathogens identified in fecal surveillance, and re-visit the use of fecal surveillance in predicting infection with these organisms post-allogeneic stem cell transplant. METHODS: Data from allogeneic stem cell transplant recipients with common drug-resistant strains of bacteria in fecal surveillance (Escherichia coli, Klebsiella spp., and Enterococcus spp.) were compared with recipients who did not have the same in fecal surveillance cultures. Baseline characteristics and post-transplant outcomes including similar drug resistance in blood cultures, severe sepsis, and 100-day transplant-related mortality were compared. Multivariate analysis using logistic regression model was used to determine independent predictors of outcome. RESULTS: In 232 transplants, the prevalence of common drug-resistant isolates in fecal surveillance cultures was 57.7% (134 out of 232 patients-with a single isolate in 115 and ≥2 isolates in the remaining 19 patients. A total of 164 drug-resistant isolates were obtained from 134 patients. Of the 164 isolates, 133 (81%) were positive for ESBL screening, 19 (11.5%) for carbapenem-resistant organisms (CRO) screening, 12 (7.3%) for VRE screening. Patients who had common drug-resistant pathogens detected in fecal surveillance have significantly higher subsequent blood culture positivity with drug resistance, as well as higher 100-day mortality. Factors influencing 100-day mortality included patient's age (P = .001), drug resistance positivity in blood (P < .001), drug resistance in fecal surveillance (P = .011), use of an alternate donor (other than fully matched sibling) (P < .001), GVHD grade 3-4 (P < .001), and severe sepsis (P < .001). On multivariate analysis, only use of an alternate donor (0.024), severe sepsis (P < .001), and grade 3-4 GVHD (P < .001) retained significance in predicting 100-day mortality. CONCLUSION: Organisms resistant to 3rd generation cephalosporins are frequently seen on fecal surveillance in the pre-transplant setting and are associated with a higher incidence of drug-resistant organisms in subsequent blood cultures (not limited to</p>	INT	JAN TO JUN	Clinical Haematology, Microbiology	<p>PMID:32107829 WOS:000520529900001 SCOPUS H-INDEX:63 IF: 2.112 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	the same drug resistance pattern as seen in fecal surveillance). Drug-resistant organisms in fecal surveillance are associated with poorer outcomes following allogeneic stem cell transplant and may be used as a guide to identify patients at risk of subsequently developing a drug-resistant organism in blood.				
321.	<p>Korula, P. J., Nayyar, V., Stachowski, E., Karuppusami, R. and Peter, J. V. An observational study on the practice of noninvasive ventilation at a tertiary level Australian intensive care unit Australian Critical Care; 2020, 33 (1): 89-96</p> <p>Address: [Korula, Pritish John; Stachowski, Edward] Westmead Hosp, Intens Care Unit, Westmead, NSW 2145, Australia. [Nayyar, Vineet] Univ Sydney, Intens Care Unit, Westmead, NSW, Australia. [Karuppusami, Reka] Christian Med Coll & Hosp, Dept Biostat, Vellore, Tamil Nadu, India. [Peter, John Victor] Christian Med Coll & Hosp, Div Crit Care, Vellore, Tamil Nadu, India. Korula, PJ (reprint author), Christian Med Coll & Hosp, Div Crit Care, Vellore 632002, Tamil Nadu, India. prishkorula@gmail.com</p> <p>Background: Failure of Non-Invasive Ventilation (NIV) is associated with increased morbidity and mortality among critically ill patients. Although there is evidence of association between disease related factors and NIV failure, it is unclear whether factors related to NIV application contribute to NIV failure. Objectives: To evaluate NIV failure rate and factors associated with NIV failure. Design, Settings and Outcomes: Prospective, observational, pilot study conducted in a 23-bed, tertiary care Intensive Care Unit (ICU). NIV failure was defined as application of NIV resulting in intubation or death in ICU. Results: Amongst 238 patients admitted with respiratory failure, NIV was administered to 60 patients (34 males, 26 females) for a total of 70 application episodes. The etiology of respiratory failure included acute pulmonary edema (28.6%), acute lung injury (22.9%) and pneumonia (15.7%). The mean (SD) age was 62 (17.6) years, BMI 32.0 (8.5) kg/m(2) and median APACHE-II score 17.5 (14.0-23.8). NIV failure occurred in 22 out of 70 applications (31.4% [95%CI 20.0-43.0]). NIV failure assessed by simple logistic regression analysis, was associated with admission diagnosis (OR 6.0, 95%CI: 1.3-28.7, p = 0.03), use of bi-level NIV-PS (OR 5.00, 95%CI: 1.04-24.1, p = 0.04), presence of nasogastric tube (OR 6.20, 95%CI: 1.9 -19.8, p < 0.01) and with short NIV breaks in the 2nd 24-hours (OR 0.96, 95%CI: 0.91-0.99, p = 0.04). Conclusion: NIV failure was observed in 31.4%. Factors associated with NIV failure were etiology of respiratory illness, type of NIV support and short NIV breaks, presumably reflecting illness severity or progress of disease. The presence of a nasogastric tube during application of NIV may adversely impact NIV application. (C) 2018 Australian College of Critical Care Nurses Ltd. Published by Elsevier Ltd. All rights reserved.</p>	INT	JAN TO JUN	Biostatistics, Critical Care Unit	<p>WOS:000506032400016 SCOPUS H-INDEX:33 IF: 2.515 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
322.	<p>Korula, S., Danda, S., Paul, P. G., Mathai, S. and Simon, A. Hepatic Glycogenoses Among Children-Clinical and Biochemical Characterization: Single-Center Study J Clin Exp Hepatol; 2020, 10 (3): 222-227</p> <p>Address: Paediatric Endocrinology and Metabolism Unit, Christian Medical College and Hospital, Vellore, India. Clinical Genetics Department, Christian Medical College and Hospital, Vellore, India.</p> <p>BACKGROUND: Glycogen storage disease (GSD) is typified by early morning seizures. Absence of this results in delayed diagnosis, especially the non-GSD 1 group. Data are limited to few patients with unclear outcome. OBJECTIVES: 1. Study the common presentation and types of GSD. 2. Study the clinical and biochemical outcome. 3. Review genetic mutations. METHODS: Observational study from May 2016-April 2019 at metabolic clinic at our center. RESULTS: Total of 30 patients were diagnosed with GSD. Ten were excluded-Fanconi-Bickel (3) and <4 months follow-up (7). Data were analyzed for 20 patients (16 males). Mean age at presentation was 4.3 yrs. All had hepatomegaly, 90% had short stature, and 40% had early morning seizures. Mean follow-up was 22 months. There was a statistically significant improvement in metabolic parameters on treatment (mean)-fasting glucose from 50.4 to 79.5 mg/dl, SGPT from 416 to 199 U/L. Lipid profile showed reduction in triglycerides (318-225 mg/dl) but minimal increase in cholesterol (178-188 mg/dl). Mean weight centile improved from 14.1 to 20.3 and height centile from 2.3 to 7.9. Genetic testing confirmed types VI (3), III (3), IXa (1), IXc (1), and Ia (1). Liver biopsy confirmed GSD in 15/20. All were managed with uncooked corn starch. In addition, omega-3 fatty acid was used in 8/20 and high protein diet in 2 with GSD type III. CONCLUSION: Awareness of GSD needs to improve among pediatricians and hepatologists. The most common symptoms are asymptomatic hepatomegaly and short stature. Dietary therapy with uncooked corn starch remains mainstay of treatment. Mixed hyperlipidemia is difficult to control despite good metabolic improvement. Role of omega-3 fatty acid needs to be explored further. Genetic mutation analysis can assist with tailoring treatment and should get precedence over liver biopsy.</p>	INT	JAN TO JUN	Paediatrics Endocrinology, Clinical Genetics	<p>PMID:32405178 PMC ID: PMC7212290 SCOPUS H-INDEX:29 IF: 0.130 BIOXBIO (2018/2019)</p>
323.	<p>Koshy, B., Karthikeyan, A., Bose, A., Roshan, R., Ramanujam, K., Mohan, V. Vr, John, S. and Kang, G. Home environment: Short term trends and predictors in early childhood from an Indian community birth cohort Child Care Health Dev; 2020, Address: Developmental Paediatrics Unit, Christian Medical College, Vellore. Wellcome research Unit, Christian Medical College, Vellore. Community Health, Christian Medical College, Vellore. Low Cost Effective Care Unit, Christian Medical College, Vellore.</p>	INT	JUL TO DEC	Developmental Paediatrics Unit, Wellcome research Unit, Community Health, Low Cost Effective Care Unit	<p>PMID: 33377201</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>BACKGROUND: Early childhood home environment is intricately linked to child development and later cognitive and academic skills. There is limited literature evaluating home environmental trends and predictors in the low and middle income country settings. AIMS: Determine the trends of early childhood home environment changes between 6 and 36 months of age, and the factors associated with these changes. STUDY DESIGN: Longitudinal community-based birth cohort follow-up study in a semi-urban slum in Vellore, South India. SUBJECTS: Consecutive sampling of a birth cohort between March 2010 and February 2012 OUTCOME MEASURES: Home environment was objectively assessed using the 'Home Observation for the Measurement of the Environment' (HOME) scale. Predictors of change in the home environment over time also were analysed. Multivariable linear regression models and linear mixed effect models were used to identify the factors associated with HOME score at individual time points and over-a-time period respectively. RESULTS: The birth cohort enrolled 251 children with a follow-up of 235, 228 and 218 children at 6, 24 and 36 months respectively. The socio-economic status (SES) was the single biggest predictor for the HOME score at each time point, with increasing strength over time. Maternal education predicted home environment at 24 months while maternal depression was negatively associated at 6 and 24 months of age. SES and maternal factors contributed to the overall change in the HOME score. Maternal factors predicted relational home environmental change over time. CONCLUSION: SES and maternal factors consistently predicted early childhood home environment at 6, 24 and 36 months of age and its change over time. It is important to support maternal education and wellbeing along with socio-economic measures to optimise early childhood environment.</p>				
324.	<p>Koshy, B., Srinivasan, M., Zachariah, S. M., Karthikeyan, A. S., Roshan, R., Bose, A., Mohan, V. R., John, S., Ramanujam, K., Muliyl, J. and Kang, G. Body iron and lead status in early childhood and its effects on development and cognition: a longitudinal study from urban Vellore Public Health Nutr; 2020, 23 (11): 1896-1906</p> <p>Address: Developmental Paediatrics Unit, Christian Medical College, Vellore, Tamil Nadu632004, India. Wellcome Research Unit, Christian Medical College, Vellore, Tamil Nadu632004, India. Community Health, Christian Medical College, Vellore, Tamil Nadu632004, India. Low Cost Effective Care Unit, Christian Medical College, Vellore, Tamil Nadu632004, India.</p> <p>OBJECTIVE: Early childhood factors can have persisting effects on development and cognition in children. We propose to explore the trends of Fe deficiency and Pb toxicity in early childhood and their association with child development at 2 years of age and cognition at 5 years. DESIGN: Longitudinal birth cohort study. SETTING:</p>	INT	JAN TO JUN	Paediatrics, Wellcome Research Unit, Community Health, Low Cost Effective Care Unit	<p>PMID:32285761 PMC:7348694 SCOPUS H-INDEX:129 IF: 2.526 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Urban slum, Vellore , India. PARTICIPANTS: Children enrolled at birth were followed up regularly in the first 2 years with developmental and cognitive assessments at 2 and 5 years of age, respectively. RESULTS: The birth cohort enrolled 251 children with 228 children followed up at 2 years and 212 at 5 years of age. Fe deficiency (ID) was highest at 15 months of age and improved subsequently at 24 months. Blood Pb levels (BLL) remained high at all age groups with an increasing trend with age; 97 % at 36 months having high BLL. Persistent high mean BLL at 15 and 24 months had negative association with both cognition and expressive language raw scores of 24 months, while high mean BLL at 15, 24 and 36 months had no significant association with any of the domains of cognition at 5 years of age. Early childhood cumulative body Fe status at 7, 15 and 24 months did not show any association with child development at 2 years, but was associated with verbal, performance and processing speed components of cognition at 5 years. CONCLUSIONS: Optimising body Fe status and limiting Pb exposure in early childhood can augment child development and school entry cognition.				
325.	<p>Koshy, K., George, T., Das, S., Punitha, J., Rajan, S., Yadav, B., Sudarsanam, T. and Turaka, V. Clinical Outcomes in Patients with Cardiac Lupus: A Retrospective Study Indian Journal of Rheumatology; 2020, 15 (2): 116-121</p> <p>Address: Department of Medicine, Christian Medical College, Vellore, Tamil Nadu, India Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India</p> <p>Objectives: Systemic lupus erythematosus (SLE) is an autoimmune disease that can affect every organ system. The study aimed to analyze the clinical manifestations, laboratory findings, antibody associations, and clinical outcomes of patients with cardiac lupus. Materials and Methods: Biomedical records of patients admitted during 2014-2017 who had a diagnosis of SLE were reviewed. Using predetermined inclusion criteria patients with cardiac lupus were identified. Disease manifestations, antibody associations, and clinical outcomes were studied. The Cox proportional hazards model was used to study factors associated with mortality. Results: Over a 3-year period, a total of 372 were admitted with a diagnosis of SLE, out of which 59 patients with cardiac lupus were identified. The patients were predominantly female (86.4%), fever and breathlessness were most common symptoms and the median SLE disease activity index score was 18. Myocardial disease (66.1%), pericardial disease (30.5%), and pulmonary artery hypertension (23.7%) were the most common cardiac manifestations. The mean ejection fraction was 46% ±11.4% with left ventricular systolic dysfunction present in 65.5% (n = 36). The inpatient mortality rate was 22% (n = 13). An elevated serum creatinine, elevated creatine Kinase-muscle/brain, neutrophilic leukocytosis, left ventricular systolic dysfunction, noninitiation of</p>	NAT	JAN TO JUN	Medicine, Biostatistics	<p>SCOPUS H-INDEX:10 IF: 0.300 RG (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	hydroxychloroquine, and the presence of neuropsychiatric lupus predicted mortality. On follow-up, 12 of the 13 echocardiograms demonstrated normal findings. Conclusion: Cardiac disease affects a significant proportion of patients with lupus. A high mortality rate as evident from this study, highlights the importance of recognizing the cardiac complications of SLE. Clinicians should diligently search for the same, as early interventions could reduce mortality and morbidity. © 2020 Indian Journal of Rheumatology IF: Published by Wolters Kluwer - Medknow.				
326.	Kota, A. A. and Agarwal, S. Significance of lateral marginal vein in Klippel-Trenaunay syndrome ANZ J Surg; 2020, Address: Department of Vascular Surgery, Christian Medical College, Vellore, India.	INT	JAN TO JUN	Vascular Surgery	PMID:32574397 SCOPUS H-INDEX:67 IF: 1.605 BIOXBIO (2018/2019)
327.	Kota, A. A., Wang, K., Leckie, K., King, J., Maijib, J. and Motaganahalli, R. L. Left colic artery aneurysm J Vasc Surg; 2020, 72 (4): 1457-1458 Address: Department of Surgery, Christian Medical College, Vellore, India. Division of Vascular Surgery, Indiana University School of Medicine, Indianapolis, Ind. Division of Vascular Surgery, Indiana University School of Medicine, Indianapolis, Ind. Electronic Address: rmotagan@iupui.edu.	INT	JUL TO DEC	Vascular Surgery	PMID: 32972590
328.	Krishan, S., Dhiman, R. K., Kalra, N., Sharma, R., Baijal, S. S., Arora, A., Gulati, A., Eapan, A., Verma, A., Keshava, S., Mukund, A., Deva, S., Chaudhary, R., Ganesan, K., Taneja, S., Gorski, U., Gamanagatti, S., Madhusudan, K. S., Puri, P., Shalimar, Govil, S., Wadhavan, M., Saigal, S., Kumar, A., Thapar, S., Duseja, A., Saraf, N., Khandelwal, A., Mukhopadyay, S., Shetty, N. and Verma, N. Corrigendum to "Joint Consensus Statement of the Indian National Association for Study of the Liver and Indian Radiological and Imaging Association for the Diagnosis and Imaging of Hepatocellular Carcinoma Incorporating Liver Imaging Reporting and Data System" [J Clin Expt Hepatol 9 (2019) 625-651] [Journal of Clinical and Experimental Hepatology (2019) 9(5) (625-651), (S0973688319301914), (10.1016/j.jceh.2019.07.005)] Journal of Clinical and Experimental Hepatology; 2020, 10 (2): 188 Address: Department of Radiology, Medanta Hospital, Gurgaon, India Department of Hepatology, Postgraduate Institute of Medical Education and Research, Chandigarh, India Department of Radiology, Postgraduate Institute of Medical Education and Research, Chandigarh, India Department of Radiology, All India Institute of Medical Sciences, New Delhi, India Department of Diagnostic and Intervention Radiology, Institute of Liver Gastroenterology & Pancreatic Biliary Sciences, Medanta Hospital, Gurgaon, India Sir Gangaram Hospital, New Delhi, India	INT	JAN TO JUN	Radiology	SCOPUS H-INDEX:29 IF: 0.130 RG (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Department of Radiology, Christian Medical College, Vellore, India Department of Radiology, Banaras Hindu University, Varanasi, India Department of Intervention Radiology, Institute of Liver and Biliary Sciences, New Delhi, India Sir HN Reliance Foundation Hospital, Mumbai, India Department of GastroEnterology, All India Institute of Medical Sciences, New Delhi, India Columbia Asia Hospital, Bangalore, India Institute of Digestive and Liver Diseases, BLK Hospital, Delhi, India Department of Hepatology, Medanta Hospital, Gurgaon, India Department of Radiology, Institute of Liver and Biliary Sciences, New Delhi, India Department of Intervention Radiology, Medanta Hospital, Gurgaon, India Department of Radiology, Tata Memorial Hospital, Kolkata, India</p> <p>The authors regret that the affiliation of co-author. Nitin Shetty mentioned in the article is incorrect. The correct affiliation is as follows: Name: Nitin Sudhakar Shetty Affiliation: (a) Interventional Radiology, Department of Radio-Diagnosis, Tata Memorial Hospital, Tata Memorial Centre, Mumbai, India (b) Homi Bhabha National Institute (HBNI), Mumbai, India Address: Dr. E. Borges Road, Parel, Mumbai, 400012, India Email ID: drnsshetty@gmail.com Phone No: 9757092013 The authors would like to apologise for any inconvenience caused. © 2019</p>				
329.	<p>Krishna, M. T., Mahesh, P. A., Vedanthan, P. K., Mehta, V., Moitra, S. and Christopher, D. J. The burden of allergic diseases in the Indian subcontinent: barriers and challenges Lancet Global Health; 2020, 8 (4): E478-E479</p> <p>Address: [Krishna, Mamidipudi T.] Univ Hosp Birmingham NHS Fdn Trust, Allergy & Immunol Dept, Birmingham B9 5SS, W Midlands, England. [Krishna, Mamidipudi T.] Univ Birmingham, Inst Immunol & Immunotherapy, Birmingham, W Midlands, England. [Christopher, Devasahayam Jesudas] Christian Med Coll & Hosp, Dept Pulm Med, Vellore, Tamil Nadu, India. [Christopher, Devasahayam Jesudas] Indian Chest Soc, Nagpur, Maharashtra, India. [Vedanthan, Pudupakkam K.] Univ Colorado, Dept Med, Div Allergy & Immunol, Aurora, CO USA. [Mahesh, Padukudru Anand] JSS Acad Higher Educ & Res, JSS Med Coll, Dept & Resp Med, Mysore, Karnataka, India. [Mehta, Vinay] Allergy Asthma & Immunol Associates, Lincoln, NE USA. [Moitra, Saibal] Apollo Gleneagles Hosp, Dept Allergy & Immunol, Kolkota, W Bengal, India.</p> <p>Krishna, MT (reprint author), Univ Hosp Birmingham NHS Fdn Trust, Allergy & Immunol Dept, Birmingham B9 5SS, W Midlands, England.; Krishna, MT (reprint author), Univ Birmingham, Inst Immunol & Immunotherapy, Birmingham, W Midlands, England. mtkrishna@yahoo.com</p>	INT	JAN TO JUN	Pulmonary Medicine	<p>WOS:000521078600014 SCOPUS H-INDEX:72 IF: 16.397 RESURCHIFY (2018/2019)</p>
330.	<p>Krishna, M. T., Mahesh, P. A., Vedanthan, P. K., Mehta, V., Moitra, S. and Christopher, D. J.</p>	INT	JUL TO DEC	Pulmonary Medicine	<p>PMID:32521565</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Pediatric allergic diseases in the Indian subcontinent-Epidemiology, risk factors and current challenges Pediatr Allergy Immunol; 2020, 31 (7): 735-744 Address: Allergy and Immunology Department, University Hospitals Birmingham NHS Foundation Trust and Institute of Immunology & Immunotherapy, University of Birmingham, Birmingham, UK. Department and Respiratory Medicine, JSS Medical College, JSSAHER, Mysore, India. Department of Medicine, Division of Allergy and Immunology, The University of Colorado, Aurora, CO, USA. Allergy, Asthma and Immunology Associates, Lincoln, NE, USA. Department of Allergy and Immunology, Apollo Gleneagles Hospital, Kolkata, West Bengal, India. Department of Pulmonary Medicine, Christian Medical College, Tamil Nadu and Indian Chest Society, Vellore, India.</p> <p>INTRODUCTION: India is low-middle-income country (LMIC) with a population of 1.3bn, comprising about 20% of the global population. While the high-income Western countries faced an "allergy epidemic" during the last three decades, there has been a gradual rise in prevalence of allergic diseases in India. METHODS: Narrative review. RESULTS AND DISCUSSION: Allergic diseases occur as a consequence of a complex interplay between genetic and environmental factors. There are multiple contrasting determinants that are important to consider in India including high levels of air pollution, in particular PM(2.5) due to burning of fossil fuels and biomass fuels, diverse aero-biology, tropical climate, cultural and social diversity, religious beliefs/myths, linguistic diversity, literacy level, breastfeeding and weaning, diet (large proportion vegetarian), and high incidence rates of TB, HIV, malaria, filariasis, parasitic infestations, and others, that not only shape the immune system early in life, but also impact on biomarkers relevant to allergic diseases. India has a relatively weak and heterogeneous healthcare framework, and allergology has not yet been recognized as an independent specialty. There are very few post-graduate training programs, and allergic diseases are managed by primary care physicians, organ-based specialists, and general pediatricians. Adrenaline auto-injectors are not available, there is patient unaffordability for inhalers, nasal sprays, and biologics, and this is compounded by poor compliance leading to 40%-50% of asthmatic children having uncontrolled disease and high rates of oral corticosteroid use. Standardized allergen extracts are not available for skin tests and desensitization. This article provides a critical analysis of pediatric allergic diseases in India.</p>				
331.	<p>Krishnakumar, A., Valsan, A. T., Duhli, N., Mohapatra, A., Tulsidas, K. S. and Varughese, S. Catching the Worm Early: An Atypical Case of Bancroftian Filariasis Nephropathy Saudi Journal of Kidney Diseases and Transplantation; 2020, 31 (5): 1101-1105 Address: Department of Nephrology, Christian Medical College, Vellore, Tamil</p>	INT	JUL TO DEC	Nephrology, General General Pathology	PMID: 33229775

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Nadu, India. Department of General General Pathology, Christian Medical College, Vellore , Tamil Nadu, India. Filarial glomerular disease has been attributed to circulating immune complex deposition. We report here a rare manifestation of filarial nephropathy with microfilariae documented in glomerular capillaries in addition to immune complex glomerulonephritis, thus suggesting that direct toxicity may also contribute to the pathogenesis of this entity.				
332.	Kuijlaars, I. A. R., Van Der Net, J., Feldman, B. M., Aspdahl, M., Bladen, M., De Boer, W., Cuesta-Barriuso, R., Matlary, R. E. D., Funk, S. M., Hilliard, P., John, J. A., De Kleijn, P., Manco-Johnson, M., Petrini, P., Poonnoose, P., St-Louis, J., Thomas, S., Timmer, M. A., Saulytetrakymiene, S., Van Vlimmeren, L. and Fischer, K. Combining real-life HJHS data and expert opinion to work towards a more compact version of the HJHS Haemophilia; 2020, 26 61-62 Address: [Kuijlaars, Isolde A. R.; de Kleijn, Piet; Timmer, Merel A.; Fischer, Kathelijnn] Univ Utrecht, Univ Med Ctr Utrecht, Van Creveldklin, Utrecht, Netherlands. [van der Net, Janjaap] Univ Utrecht, Childrens Hosp, Ctr Child Dev Exercise & Phys Literacy, Univ Med Ctr Utrecht, Utrecht, Netherlands. [Feldman, Brian M.] Hosp Sick Children, Div Rheumatol, Toronto, ON, Canada. [Aspdahl, Magnus; Petrini, Pia] Karolinska Univ Hosp, Dept Pediat, Clin Coagulat Disorders, Stockholm, Sweden. [Bladen, Melanie] Great Ormond St Hosp Children NHS Fdn Trust, Haemophilia Ctr, London, England. [de Boer, Wypke] Univ Amsterdam, Dept Rehabil, Amsterdam UMC, Amsterdam, Netherlands. [Cuesta-Barriuso, Ruben] Royal Victoria Eugenia Fdn, Madrid, Spain. [Matlary, Ruth E. D.] Oslo Univ Hosp, Dept Haematol, Oslo, Norway. [Funk, Sharon M.; Manco-Johnson, Marily] Univ Colorado Anschutz Med Campus, Hemophilia & Thrombosis Ctr, Aurora, CO USA. [Hilliard, Pamela] Hosp Sick Children, Child Hlth Evaluat Sci, Toronto, ON, Canada. [John, Judy A.] Christian Med Coll & Hosp , Dept PMR, Vellore , Tamil Nadu, India. [Poonnoose, Pradeep] Christian Med Coll & Hosp , Dept Orthopaed, Vellore , Tamil Nadu, India. [St-Louis, Jean] CHU St Justine, Montreal, PQ, Canada. [Thomas, Sylvia] Univ Fed Rio de Janeiro, Clementino Fraga Filho Univ Hosp, Rio De Janeiro, Brazil. [SaulyteTrakymiene, Sonata] Vilnius Univ, Ctr Pediat Oncol & Hematol, Vilnius, Lithuania. [van Vlimmeren, Leo] Radboud Univ Nijmegen Med Ctr, Paediat Phys Therapy, Dept Rehabil, Nijmegen, Netherlands.	INT	JAN TO JUN	Physical Medicine and Rehabilitation, Orthopaedics	WOS:000536674800104 H-INDEX:88 IF: 3.590 BIOXBIO (2018/2019)
333.	Kuijlaars, I. A. R., Van Der Net, J., Feldman, B. M., Aspdahl, M., Bladen, M., De Boer, W., Cuesta-Barriuso, R., Matlary, R. E. D., Funk, S. M., Hilliard, P., John, J. A., Kempton, C. L., De Kleijn, P., Manco-Johnson, M., Petrini, P., Poonnoose, P., St-Louis, J., Thomas, S., Timmer, M. A., Trakymiene, S. S., Van Vlimmeren, L. and Fischer, K. Evaluating international Haemophilia Joint Health Score (HJHS) results combined with expert opinion: Options for a shorter HJHS Haemophilia; 2020, 26 (6): 1072-1080	INT	JUL TO DEC	PMR, Orthopaedics	SCOPUS

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Address: Van Creveldkliniek, University Medical Center Utrecht, Utrecht University, Utrecht, Netherlands Center for Child Development, Exercise and Physical Literacy, Children's Hospital of the University Medical Center Utrecht, Utrecht University, Utrecht, Netherlands Child Health Evaluative Sciences Program, Research Institute, The Hospital for Sick Children, Toronto, ON, Canada Department of Pediatrics, Faculty of Medicine and the Institute of Health Policy Management & Evaluation, Dalla Lana School of Public Health, University of Toronto, Toronto, ON, Canada Division of Rheumatology, The Hospital for Sick Children, Toronto, ON, Canada Department of Pediatrics, Clinic of Coagulation Disorders, Karolinska University Hospital, Stockholm, Sweden Haemophilia Center, Great Ormond Street Hospital for Children NHS Foundation Trust, London, United Kingdom Department of Rehabilitation, Amsterdam UMC, University of Amsterdam, Amsterdam, Netherlands Department of Physiotherapy, European University of Madrid, Madrid, Spain Royal Victoria Eugenia Foundation, Madrid, Spain Fishemo CEE, Spanish Federation of Hemophilia, Madrid, Spain Department of Haematology, Oslo University Hospital, Oslo, Norway Hemophilia and Thrombosis Center, University of Colorado Anschutz Medical Campus, Aurora, CO, United States Department of PMR, Christian Medical College, Vellore, India Hemophilia of Georgia Center for Bleeding & Clotting Disorders of Emory, Emory University School of Medicine, Atlanta, GA, United States Department of Orthopaedics, Christian Medical College, Vellore, India CHU Sainte-Justine, Montreal, Canada Department of Radiology, Clementino Fraga Filho University Hospital, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil Clinic of Children's diseases, Faculty of Medicine, Vilnius University, Vilnius, Lithuania Department of Rehabilitation, Paediatric Physical Therapy, Radboud university medical center, Nijmegen, Netherlands</p> <p>Introduction: The Hemophilia Joint Health Score (HJHS) was developed to detect early changes in joint health in children and adolescents with haemophilia. The HJHS is considered by some to be too time consuming for clinical use and this may limit broad adoption. Aim: This study was a first step to develop a shorter and/or more convenient version of the HJHS for the measurement of joint function in children and young adults with haemophilia, by combining real-life data and expert opinion. Methods: A cross-sectional multicenter secondary analysis on pooled data of published studies using the HJHS (0-124, optimum score 0) in persons with haemophilia A/B aged 4-30 was performed. Least informative items, scoring options and/or joints were identified. An expert group of 19 international multidisciplinary experts evaluated the results and voted on suggestions for</p>				

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	adaptations in a structured meeting (consensus set at $\geq 80\%$). Results: Original data on 499 persons with haemophilia from 7 studies were evaluated. Median age was 15.0 years [range 4.0-29.9], 83.2% had severe haemophilia and 61.5% received prophylaxis. Median (IQR) HJHS total was 6.0 (1.0-17.0). The items 'duration swelling' and 'crepitus' were identified as clinically less informative and appointed as candidates for reduction. Conclusion: Analysis of 499 children and young adults with haemophilia showed that the HJHS is able to discriminate between children and adults and different treatment regimens. Reduction of the items 'duration swelling' and 'crepitus' resulted in the HJHSshort, which had the same discriminative ability. Additional steps are needed to achieve a substantially shorter HJHS assessment. © 2020 The Authors. Haemophilia published by John Wiley & Sons Ltd				
334.	<p>Kulinkina, A. V., Sarkar, R., Mohan, V. R., Walz, Y., Kaliappan, S. P., Ajjampur, S. S. R., Ward, H., Naumova, E. N. and Kang, G.</p> <p>Prediction of hookworm prevalence in southern India using environmental parameters derived from Landsat 8 remotely sensed data International Journal for Parasitology; 2020, 50 (1): 47-54</p> <p>Address: [Kulinkina, Alexandra V.] Tufts Univ, Sch Med, Dept Publ Hlth & Community Med, Boston, MA 02111 USA. [Kulinkina, Alexandra V.] Partners Hlth, Neno, Malawi. [Sarkar, Rajiv; Kaliappan, Saravanakumar P.; Ajjampur, Sitara S. R.; Ward, Honorine; Naumova, Elena N.; Kang, Gagandeep] Christian Med Coll & Hosp, Div Gastrointestinal Sci, Vellore, Tamil Nadu, India. [Mohan, Venkata R.] Christian Med Coll & Hosp, Dept Community Hlth, Vellore, Tamil Nadu, India. [Walz, Yvonne] United Nations Univ, Inst Environm & Human Secur, Bonn, Germany. [Ward, Honorine] Tufts Med Ctr, Div Geog Med & Infect Dis, Boston, MA 02111 USA. [Naumova, Elena N.] Tufts Univ, Friedman Sch Nutr Sci & Policy, Boston, MA 02111 USA. Kulinkina, AV (reprint author), Tufts Univ, Sch Med, 145 Harrison Ave, Boston, MA 02111 USA. alexandra.kulinkina@tufts.edu</p> <p>Soil-transmitted helminth infections propagate poverty and slow economic growth in low-income countries. As with many other neglected tropical diseases, environmental conditions are important determinants of soil-transmitted helminth transmission. Hence, remotely sensed data are commonly utilised in spatial risk models intended to inform control strategies. In the present study, we build upon the existing modelling approaches by utilising fine spatial resolution Landsat 8 remotely sensed data in combination with topographic variables to predict hookworm prevalence in a hilly tribal area in southern India. Hookworm prevalence data collected from two field surveys were used in a random forest model to investigate the predictive capacity of 15 environmental variables derived from two remotely sensed images acquired during dry and rainy seasons. A variable buffer radius (100-1000 m) was applied to the point-prevalence locations</p>	INT	JAN TO JUN	Gastrointestinal Sciences, Community Health	<p>WOS:000510952700006 SCOPUS H-INDEX:139 IF: 3.478 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	in order to integrate environmental conditions around the village centroids into the modelling approach and understand where transmission is more likely. Elevation and slope were the most important variables in the models, with lower elevation and higher slope correlating with higher transmission risk. A modified normalised difference water index was among other recurring important variables, likely responsible for some seasonal differences in model performance. The 300 m buffer distance produced the best model performance in this setting, with another spike at 700 m, and a marked drop-off in R-2 values at 1000 m. In addition to assessing a large number of environmental correlates with hookworm transmission, the study contributes to the development of standardised methods of spatial linkage of continuous environmental data with point-based disease prevalence measures for the purpose of spatially explicit risk profiling. (C) 2019 Australian Society for Parasitology. Published by Elsevier Ltd. All rights reserved.				
335.	<p>Kulkarni, N., Rosario, D. P., Akkal, S., Beck, M. M., David, L. S., Vijayaselvi, R. and Murari, B. M. An Integrated System for Fetal Scalp Visualization, Blood Collection and Analysis J Obstet Gynaecol India; 2020, 70 (3): 208-213</p> <p>Address: 1Department of Obstetrics and Gynecology Unit 4, Christian Medical College, Vellore, Tamil Nadu India. GRID: grid.11586.3b. ISNI: 0000 0004 1767 8969 2Department of Sensor and Biomedical Technology, School of Electronics Engineering VIT Vellore, Vellore, Tamil Nadu India. GRID: grid.412813.d. ISNI: 0000 0001 0687 4946</p> <p>KEY MESSAGE: The new NB scope aids in better visualization of the scalp and blood collection and analysis at bed side. OBJECTIVE: Caesarean section rates and inherent complications are on the rise all over the world. One way to avoid a caesarean is to measure fetal scalp blood lactate levels. The methods available to visualize fetal scalp, obtain the blood sample and perform the blood test are separate, cumbersome and expensive, needing a certain level of expertise. We propose a device that incorporates all the steps of obtaining a fetal scalp blood lactate into one sleek, easy to use device. METHODS: The initial design, 3-D print and was tried on mannequin. After ethics committee approval, the prototype was experimented on patients in labour with singleton live fetus in cephalic presentation with no evidence of distress. RESULTS: There were (n = 9) patients recruited. There were (n = 5) primigravida and (n = 4) multigravida all of whom were in active labour. Parity did not seem to influence ease of instrumentation. Of the (n = 9) mothers (n = 2) had meconium-stained liquor and the rest (n = 7) had clear liquor, meconium-stained liquor did not affect visualization. The mean time taken to collect the sample was 184.11(± 33.04) seconds. CONCLUSION: The Neeraj-Bhaskar (NB) scope is an easy to use, affordable device that can be used time and again to decide on cases where emergency caesarean section can be</p>	NAT	JAN TO JUN	Obstetrics and Gynaecology Unit IV	<p>PMID:32476767 PMC ID: PMC7239983 SCOPUS H-INDEX:NA IF: 0.560 RG (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	avoided due to fetal distress. © 2020, Federation of Obstetric & Gynecological Societies of India.				
336.	<p>Kulkarni, U., Ganesan, S., Alex, A. A., Palani, H., David, S., Balasundaram, N., Venkatraman, A., Thenmozhi, M., Jeyaseelan, L., Korula, A., Devasia, A., Abraham, A., Janet, N. B., Balasubramanian, P., George, B. and Mathews, V.</p> <p>A phase II study evaluating the role of bortezomib in the management of relapsed acute promyelocytic leukemia treated upfront with arsenic trioxide Cancer Med; 2020, 9 (8): 2603-2610</p> <p>Address: Department of Haematology, Christian Medical College, Vellore, India. Department of Biostatistics, Christian Medical College, Vellore, India.</p> <p>The standard-of-care for patients with acute promyelocytic leukemia (APL) relapsing after upfront arsenic trioxide (ATO) therapy is not defined. The present study was undertaken to evaluate the safety of addition of bortezomib to ATO in the treatment of relapsed APL based on our previously reported preclinical data demonstrating synergy between these agents. This was an open label, nonrandomized, phase II, single-center study. We enrolled 22 consecutive patients with relapsed APL. The median age was 26.5 years (interquartile range 17.5 to 41.5). The median time from initial diagnosis to relapse was 23.1 months (interquartile range 15.6 to 43.8). All patients achieved hematological remission at a median time of 45 days (range 40-63). Nineteen patients were in molecular remission at the end of induction. Grade 3 adverse events occurred in eight instances with one patient requiring discontinuation of therapy for grade 3 neuropathy. Twelve (54.5%) patients underwent autologous transplantation (auto-SCT) in molecular remission while the rest opted for maintenance therapy. The median follow-up was 48 months (range 28-56.3). Of the patients undergoing auto-SCT, all except one was alive and relapse free at last follow-up. Of the patients who opted for maintenance therapy, three developed a second relapse. For treatment of APL relapsing after upfront ATO therapy, addition of bortezomib to a standard ATO-based salvage regimen is safe and effective. This trial was registered at www.clinicaltrials.gov as NCT01950611.</p>	INT	JAN TO JUN	Clinical Haematology, Biostatistics	<p>PMID:32059085 PMC ID: PMC7163093 WOS:000513308500001 SCOPUS H-INDEX:44 IF: 3.460 RESURCHIFY (2018/2019)</p>
337.	<p>Kumar, C. P. G., Giri, S., Chawla-Sarkar, M., Gopalkrishna, V., Chitambar, S. D., Ray, P., Venkatasubramanian, S., Borkakoty, B., Roy, S., Bhat, J., Dwibedi, B., Paluru, V., Das, P., Arora, R., Kang, G., Mehendale, S. M. and Natl Rotavirus, Surveillance Epidemiology of rotavirus diarrhea among children less than 5 years hospitalized with acute gastroenteritis prior to rotavirus vaccine introduction in India Vaccine; 2020, 38 (51): 8154-8160</p> <p>Address: [Kumar, C. P. Girish; Venkatasubramanian, S.; Mehendale, Sanjay M.] ICMR Natl Inst Epidemiol, Chennai, Tamil Nadu, India. [Giri, Sidhartha; Kang, Gagandeep] Christian Med Coll & Hosp, Div Gastrointestinal Sci, Vellore, Tamil Nadu, India. [Chawla-Sarkar, Mamta] ICMR Natl Inst Cholera & Enter Dis, Kolkata, W Bengal, India. [Gopalkrishna, Varanasi; Chitambar, Shobha D.] ICMR Natl Inst</p>	INT	JUL TO DEC	Gastrointestinal Sciences	WOS:000595503300017

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Virol, Pune, Maharashtra, India. [Ray, Pratima] Jamia Hamdard, New Delhi, India. [Borkakoty, Biswajyoti] ICMR Reg Med Res Ctr, Dibrugarh, Assam, India. [Roy, Subarna] ICMR Natl Inst Tradit Med, Belgaum, Karnataka, India. [Bhat, Jyothi] ICMR Natl Inst Res Tribal Hlth, Jabalpur, Madhya Pradesh, India. [Dwivedi, Bhagirathi] ICMR Reg Med Res Ctr, Bhubaneswar, Odisha, India. [Paluru, Vijayachari] ICMR Reg Med Res Ctr, Port Blair, Andaman & Nicob, India. [Das, Pradeep] ICMR Rajendra Mem Res Inst Med Sci, Patna, Bihar, India. [Arora, Rashmi; Mehendale, Sanjay M.] Indian Council Med Res ICMR, New Delhi, India. [Giri, Sidhartha] Indian Council Med Res, New Delhi, India. [Arora, Rashmi; Kang, Gagandeep] Translat Hlth Sci & Technol Inst, Faridabad, Haryana, India. [Mehendale, Sanjay M.] PD Hinduja Natl Hosp & Med Res Ctr, Mumbai, Maharashtra, India.</p> <p>Mehendale, SM (corresponding author), Indian Council Med Res, New Delhi, India.; Mehendale, SM (corresponding author), PD Hinduja Natl Hosp & Med Res Ctr, Mumbai, Maharashtra, India.</p> <p>sanjay.mehendale@hindujahospital.com</p> <p>Background: Rotavirus is an important cause of severe diarrhea requiring hospitalization, accounting for approximately 78,000 deaths annually in Indian children below 5 years of age. We present epidemiological data on severe rotavirus disease collected during hospital-based surveillance in India before the introduction of the oral rotavirus vaccine into the national immunization schedule. Methods: The National Rotavirus Surveillance Network was created involving 28 hospital sites and 11 laboratories across the four geographical regions of India. From September 2012 to August 2016 children less than 5 years of age hospitalized for diarrhea for at least 6 h, were enrolled. After recording clinical details, a stool sample was collected from each enrolled child, which was tested for rotavirus antigen using enzyme immunoassay (EIA). Nearly 2/3rd of EIA positive samples were genotyped using reverse transcription polymerase chain reaction to identify the G and P types. Results: Of the 21,421 children enrolled during the 4 years surveillance, 36.3% were positive for rotavirus. The eastern region had the highest proportion of rotavirus associated diarrhea (39.8%), while the southern region had the lowest (33.8%). Rotavirus detection rates were the highest in children aged 6-23 months (41.8%), and 24.7% in children aged < 6 months. Although rotavirus associated diarrhea was seen throughout the year, the highest positivity was documented between December and February across all the regions. The most common rotavirus genotype was G1P[8] (52.9%), followed by G9P4 (8.7%) and G2P4 (8.4%). Conclusions: There is high burden of rotavirus gastroenteritis among Indian children below 5 years of age hospitalized for acute diarrhea thereby highlighting the need for introduction of rotavirus vaccine into the national immunization program and also for monitoring circulating genotypes. (C) 2020 The Authors. Published by Elsevier Ltd.</p>				
338.	Kumar, R., Gupta, R. D., Shetty, S., Prabhu, C. S., Sathyakumar, K., Mruthyunjaya, M. D., Jebasingh, F. K., Inbakumari, M., Christina, F., Asha, H. S., Paul, T. V. and Thomas, N.	INT	JUL TO DEC	Endocrinology, Radiology	WOS:000591957400001

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Lipohypertrophy in insulin injecting patients with diabetes mellitus: an under-recognized barrier for glycemic control International Journal of Diabetes in Developing Countries;</p> <p>Address: [Kumar, Rajinder; Gupta, Riddhi Das; Shetty, Sahana; Prabhu, C. S.; Sathyakumar, Kirthi; Mruthyunjaya, Mahesh Doddabelavangala; Jebasingh, Felix K.; Inbakumari, Mercy; Christina, Flory; Asha, H. S.; Paul, Thomas Vizhalil; Thomas, Nihal] Christian Med Coll & Hosp, Dept Endocrinol Diabet & Metab, Vellore 632004, Tamil Nadu, India. [Prabhu, C. S.; Sathyakumar, Kirthi] Christian Med Coll & Hosp, Dept Radiol, Vellore, Tamil Nadu, India. Thomas, N (corresponding author), Christian Med Coll & Hosp, Dept Endocrinol Diabet & Metab, Vellore 632004, Tamil Nadu, India. nihal_thomas@yahoo.com</p> <p>Background Lipohypertrophy is the one of the commonest local complications that significantly affects glycemic control in patients of diabetes mellitus on treatment with insulin. Our study aimed at assessing the clinical and ultrasonographic characteristics and risk factors for lipohypertrophy on the abdomen in a cohort of insulin-injecting Indian diabetes patients. Materials Eighty-eight consecutive patients with type 1 (15/88) or type 2 diabetes mellitus (73/88) were included in this cross-sectional study conducted over a period of 6 months. The prevalence of lipohypertrophy and associated risk factors was assessed by clinical examination. A novel ultrasonographic characterisation of lipohypertrophy (LH) using a predetermined grading system was performed by two sonologists who were blinded to the underlying clinical findings. Kappa statistics was used to calculate the agreement between the clinical and ultrasound methods of detection of lipohypertrophy. Results The prevalence of lipohypertrophy was 68% on clinical examination and 90% on ultrasonography with moderate kappa agreement (60%). The commonest patterns on clinical and ultrasonographic assessment were Grade 2 (palpable and visible - 43%) and nodular hyperechoic subcutaneous dystrophy (33%), respectively. Duration of insulin use, incorrect site rotation, and repeated needle reuse ($p < 0.01$) were the most important risk factors. The total daily dose of insulin ($p = 0.01$) and mean Hba1c ($p = 0.02$) were significantly higher in those with clinically detected lipohypertrophy. The needle length, caliber, the mode of delivery, or regimen of insulin used did not significantly impact development of lipohypertrophy ($p = 0.15$). Conclusion A thorough clinical examination of insulin injection sites is of paramount importance in detecting lipohypertrophy. Adequate control of risk factors can significantly impact insulin requirements and glycemic control, while ultrasonography can prove to be a novel and sensitive tool to detect abdominal lipohypertrophy in the majority of patients, even when clinical examination is non-contributory.</p>				
339.	Kumar, S. Round up	NAT	JAN TO JUN	Urology	PMID:32549655 PMC ID: PMC7279099

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Indian J Urol; 2020, 36 (2): 77-78 Address: Department of Urology, Christian Medical College, Vellore , Tamil Nadu, India.				SCOPUS H-INDEX: 29 IF: 0.820 RG (2018/2019)
340.	Kumar, S. What's inside Indian J Urol; 2020, 36 (4): 246-247 Address: Department of Urology, Christian Medical College, Vellore , Tamil Nadu, India.	INT	JUL TO DEC	Urology	PMID: 33376258 PMC: 7759184
341.	Kumar, S., Doss, S. A., Jacob, S., A, T. Valson, Alexander, S., David, V. G., Varughese, S. and Daniel, D. Association of prior sensitizing events with anti-human leukocyte antigen antibodies: An analysis of renal transplant recipients in a tertiary care centre in South India Transfus Apher Sci; 2020, 102808 Address: Department of Transfusion Medicine and Immunohaematology, 5th Floor, ASHA Building, Christian Medical College, Vellore , Tamil Nadu, India. Electronic Address: snehilsimulation25@gmail.com. Department of Transfusion Medicine and Immunohaematology, 5th Floor, ASHA Building, Christian Medical College, Vellore , Tamil Nadu, India. Department of Nephrology, Christian Medical College, Vellore , Tamil Nadu, India. Traditionally, sensitizing events such as previous pregnancies, previous transfusions and prior transplants result in the production of anti-Human Leukocyte Antigen (HLA) antibodies. However, it has been observed that, anti-HLA antibodies have been detected in many patients with no prior history of sensitizing events. This retrospective study analysed the most recent 100 consecutive Single Antigen Bead (SAB) assay results performed on 100 patients. The SAB assay is used routinely to detect anti-HLA antibodies in transplant recipients. Results of the SAB assay were analyzed and subsequently studied to see if a correlation existed between sensitizing events, the type of events and presence of antibody. Analysis showed that 77% (77/100) had anti-HLA antibodies. 61 out of 100 patients had prior sensitizing events while the remaining 39 had none. Both these groups showed an almost equal percent of patients with anti-HLA antibodies 77% (47/61) and 76.9% (30/39) respectively. A single sensitizing event was seen in 54.1% (33/61) patients including previous transfusions in 29.5% (18/61), pregnancies in 11.4% (7/61) and prior transplant in 13.1% (8/61). Our study suggests that irrespective of whether patients have prior sensitizing events or not, patients run the risks of alloimmunization, and therefore appropriate screening tests should be included in the pre-transplant compatibility algorithm.	INT	JAN TO JUN	Transfusion Medicine and Immunohaematology, Nephrology	PMID: 32444280 SCOPUS H-INDEX: 53 IF: 1.412 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
342.	<p>Kumar, S., Doss, S. A., Stephen, S., Pratheeba, M., Jeyaseelan, L. and Daniel, D. The challenge of using the virtual crossmatch as a singular tool for the detection of Anti-HLA antibodies- A study from a tertiary care institute from South India Transpl Immunol; 2020, 101349 Address: Department of Transfusion Medicine and Immunohaematology, Christian Medical College, Vellore 632004, Tamil Nadu, India. Electronic Address: snehil25@cmcvellore.ac.in. Department of Transfusion Medicine and Immunohaematology, Christian Medical College, Vellore 632004, Tamil Nadu, India. Department of Biostatistics, Christian Medical College, Vellore 632004, Tamil Nadu, India. Department of Transfusion Medicine and Immunohaematology, Christian Medical College, Vellore 632004, Tamil Nadu, India. Electronic Address: dollyd@cmcvellore.ac.in.</p> <p>INTRODUCTION: Detection of donor specific antibodies (DSA) is critical in both solid organ and mismatched haematopoietic stem cell transplants. The single antigen bead assay (SAB) is widely used as a virtual crossmatch in these settings. However, HLA allele variation across ethnicities and differing genetic backgrounds is a well-known and acknowledged fact and representation of alleles prevalent in a population is key while using a virtual crossmatch as a sole decision making tool. Against this background, this study was performed to assess the feasibility of using the SAB as a single tool to identify DSA in our population. MATERIALS AND METHODS: The HLA alleles identified in the study population were analysed to assess their representation on SAB panels from two different vendors. RESULTS: The study population comprised of a total of 966 subjects for whom 6 loci high resolution HLA typing was done. A total of 241 different alleles were assigned in the population. Among the 241 alleles identified in our study population, 48.55% (n = 117) alleles were represented in the SAB A panel and 48.13% (n = 116) represented in the SAB B panel. Unrepresented alleles were 51.45% (n = 124) in panel A and 51.87% (n = 125) in panel B. All the twelve alleles were represented for 16.05% (n = 155) and 16.25% (n = 157) of study population in panel A and in panel B respectively. The remaining individuals (83.95%, (n = 811) in panel A and 83.75%, (n = 809) in panel B) had at least one allele unrepresented. CONCLUSION: Our study addresses an important limitation in utilizing the SAB as a single tool to identify DSA, owing to non-representation of locally prevalent / unique alleles in our population. More than 50% of alleles were unrepresented in both the SAB assays we studied, which included alleles from both Class I and Class II. We recommend therefore that, until a comprehensive coverage of alleles is provided, or epitope matching becomes robust, that the SAB be combined with a physical crossmatch when mismatched alleles are not represented.</p>	INT	JUL TO DEC	Transfusion Medicine and Immunohaematology, Biostatistics	PMID: 33127497
343.	<p>Kumar, U., Jain, A., Guleria, A., Kumar, R. V., Misra, D. P., Goel, R., Danda, D., Misra, R. and Kumar, D. Circulatory Glutamine/Glucose ratio for evaluating disease activity in Takayasu</p>	INT	JAN TO JUN	Clinical Immunology and Rheumatology	WOS:000514256500044 PMID:31896520 SCOPUS

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>arteritis: A NMR based serum metabolomics study Journal of Pharmaceutical and Biomedical Analysis; 2020, 180 7</p> <p>Address: [Kumar, Umesh; Guleria, Anupam; Kumar, Dinesh] Ctr Biomed Res, Lucknow 226014, Uttar Pradesh, India. [Jain, Avinash; Misra, Durga P.; Misra, Ramnath] SGPGIMS, Dept Clin Immunol, Raibareli Rd, Lucknow 226014, Uttar Pradesh, India. [Kumar, Umesh; Kumar, Venkatesh R.] BBAU, Dept Zool, Lucknow 226025, Uttar Pradesh, India. [Goel, Ruchika; Danda, Debashish] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India.</p> <p>Misra, R (reprint author), SGPGIMS, Dept Clin Immunol, Raibareli Rd, Lucknow 226014, Uttar Pradesh, India.; Kumar, D (reprint author), Ctr Biomed Res CBMR, SGPGIMS Campus, Lucknow 226014, Uttar Pradesh, India. rnmisra2000@gmail.com; dineshcbmr@gmail.com</p> <p>Quantitative assessment of disease activity is important for effective care of patients with Takayasu arteritis (TA). Activated glutaminolysis and reduced glycolytic flux is the hallmark of active inflammation. Based on this, we hypothesize that the circulatory Glutamine/Glucose ratio (QGR) can serve as an indicant of active inflammation in TA. To probe this hypothesis, the serum samples were collected from 45 active and 53 inactive TA patients fulfilling American College of Rheumatology (ACR) criteria and assessed for disease activity according to Indian Takayasu Clinical Activity Score (ITAS) using acute phase reactant-erythrocyte sedimentation rate [ITAS-A (ESR)]. The quantitative profiles of circulatory metabolites implicated in glutaminolysis (Glutamine and Glutamate) and those which estimate glycolytic flux (i.e. glucose and lactate) were measured using high field (800 MHz) NMR spectroscopy. The recorded spectra were analyzed using CHENOMX NMR Suite and the estimated concentration profiles were compared and evaluated for their diagnostic potential using Metaboanalyst. Compared to inactive-TA patients, the sera of active-TA patients were characterized by significantly decreased serum levels of glutamine and lactate suggesting that these patients exhibit activated glutaminolysis and reduced glycolytic activity. This is further supported by significantly decreased QGR and lactate to glucose ratio (LGR) levels in active compared to inactive TA patients. The receiver operating characteristic (ROC) curve analysis revealed satisfactory accuracy, sensitivity and specificity for QGR [with area under ROC curve (AUROC) = 0.76 and 95% confidence interval (CI) = 0.66-0.84] compared to that for LGR (with AUROC = 0.67 and CI = 0.561-0.77). Therefore, we believe that the circulatory QGR has the potential to serve as surrogate marker for the assessment of disease activity in TA patients. However, the use of this ratio in clinical settings will require future studies on large patient cohorts and procedural optimization as well to improve accuracy. (C) 2019 Elsevier B.V. All rights reserved.</p>				<p>H-INDEX:120 IF: 2.983 BIOXBIO (2018/2019)</p>
344.	Kumar, V., Mishra, B., Joshi, M. K., Purushothaman, V., Agarwal, H., Anwer, M., Sagar, S., Kumar, S., Gupta, A., Bagaria, D., Choudhary, N., Kumar, A., Priyadarshini, P., Soni,	INT	JUL TO DEC	Trauma Surgery	PMID: 33041017

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>K. D. and Aggarwal, R. Early hospital discharge following non-operative management of blunt liver and splenic trauma: A pilot randomized controlled trial Injury; 2020, Address: Division of Trauma Surgery & Critical Care, Jai Prakash Narayan Apex Trauma Centre, AIIMS, New Delhi, India; Department of Trauma Surgery, Christian Medical College & Hospital, Vellore, Tamil Nadu, India. Division of Trauma Surgery & Critical Care, Jai Prakash Narayan Apex Trauma Centre, AIIMS, New Delhi, India. Division of Trauma Surgery & Critical Care, Jai Prakash Narayan Apex Trauma Centre, AIIMS, New Delhi, India. Electronic Address: drmohitjoshi@gmail.com. BACKGROUND: Despite the acceptance of non-operative management (NOM), there is no consensus on the optimal length of hospital stay in patients with blunt liver and splenic injury (BLSI). Recent studies on pediatric patients have demonstrated the safety of early discharge following NOM for BLSI. We aimed at evaluating the feasibility and safety of early discharge in adult patients with BLSI following NOM in a randomized controlled trial. MATERIALS AND METHODS: After initial assessment and management, patients aged 18-60 years with BLSI planned for NOM were randomized into 2 groups: Group A (test group; discharge day 3), and Group B (control group; discharge day 5). Standard NOM protocol was followed. These patients were discharged on the proposed day if they met the pre-defined discharge criteria. All patients were followed at days 7, 15, and 30 of discharge. RESULTS: Sixty patients were recruited, 30 randomized to each arm. Most patients were males and aged less than 30 years. Road traffic injury was the most common mode of injury. Both groups were comparable in demography and injury-related parameters. 27 patients (90%) from group A and 28 patients (93%) from group B were discharged on the proposed day. Three patients had unplanned hospital visits for reasons unrelated to BLSI. All patients were asymptomatic and had a normal examination during their scheduled follow-up visits. CONCLUSION: Adult patients undergoing NOM for BLSI can be safely discharged after 48 h of in-hospital observation, provided other injuries precluding discharge do not exist.</p>				
345.	<p>Kunnath, F., Bhowmick, K. and P, R. J. V. C. B. Rare Coexistence of Giant Cell Tumor and Tuberculosis of the Metatarsal Cureus; 2020, 12 (12): e12090 Address: Orthopaedics, Christian Medical College and Hospital, Vellore, IND . The coexistence of giant cell tumor (GCT) and metatarsal bone tuberculosis (TB) of the foot has not been reported in the literature so far. We report a case of a 25-year-old male who presented with severe pain and swelling of his left foot for two months, which was aggravated on walking. A plain radiograph of the left foot showed an expansile eccentric lytic lesion of the base of the second metatarsal. He underwent extended curettage and antibiotic cement spacer insertion. Biopsy of the lesion revealed the presence of GCT, while tissue cultures were positive for</p>	INT	JUL TO DEC	Orthopaedics	PMID:33489508 PMC ID:7805530

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Mycobacterium tuberculosis. He was treated with standard anti-tubercular treatment (ATT), four drug regimens for twelve months. He then underwent reconstruction of the second metatarsal with cement spacer exit and iliac crest bone grafting, following which the cultures were negative for TB. The diagnosis of this unexpected and unique combination of pathologies (GCT and TB) depends on a high index of clinical suspicion, relevant investigations, and accurate histological diagnosis				
346.	<p>Kurian, J. J., Sen, S., Kishore, R. and Srinivas, R. Urethro vaginal injuries associated with pelvic fracture - A spectrum of clinical presentation and management J Pediatr Urol; 2020, 16 (4): 470 e1-470 e6</p> <p>Address: Department of Paediatric Surgery, Christian Medical College, Vellore, Tamilnadu, 632004, India. Electronic Address: jujujacobkurian@gmail.com. Department of Paediatric Surgery, Christian Medical College, Vellore, Tamilnadu, 632004, India. Department of Paediatric Surgery, Christian Medical College, Vellore, Tamilnadu, 632004, India. Electronic Address: ravikishore96@gmail.com . Department of Paediatric Surgery, Christian Medical College, Vellore, Tamilnadu, 632004, India. Electronic Address: rohithsms@ymail.com .</p> <p>BACKGROUND: Blunt trauma to the paediatric pelvis is associated with urethral rupture, sometimes even without a bony fracture. While such rupture of the male urethra has received considerable mention, female urethral injury is both less common and has received less attention. OBJECTIVE: We describe 4 cases of urethro vaginal injury associated with pelvic fracture, its varied presentations and the modalities employed in its management. PATIENTS AND METHODS: A retrospective study was done to identify 4 patients who presented to our institution between 2007 and 2018. All 4 girls suffered a loss of a urethral segment ranging from the distal urethra (n = 2) to complete urethral loss (n = 2) and rupture of the bladder neck in one. All 4 girls also had associated vaginal injury resulting in varied clinical presentation including total urinary incontinence, urocolpos, vaginal voiding via an acquired hypospadias and urinary retention with late onset haematocolpos. All were managed initially with SPC and three of them underwent urethral substitution with Monti ileal tube in two and vestibular mucosal flap in one. The hypospadiac neo-meatus was continent and was left alone. The ruptured vagina was repaired by rectus muscle interposition, direct suturing, posterior vaginal U flap or colonic patch. An appendicular Mitrofanoff was added for safety in 2 girls. RESULTS: Follow up was done till June 2019 (range 1-12 years). All patients voided satisfactorily and were fully continent. Normal menstrual function was present in the 3 post pubertal children. CONCLUSION: A traumatic force capable of causing urethral injury may often result in associated vaginal injury and should not be overlooked. Thus urinary retention is not the only presentation of</p>	INT	JAN TO JUN	Paediatric Surgery	PMID:32536568 SCOPUS H-INDEX:41 IF: 1.736 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	urethral injury in girls. Fistulation to the vagina may result in continent or incontinent vaginal voiding if the vagina has not been transected and urocolpos/haematocolpos in those with vaginal transection. Various modalities maybe employed to maintain continuity of the urethra and vagina including use of bowel and local flaps.				
347.	Kurian, M. E., Jebasingh, F. K., Sigamani, E. and Thomas, N. Extramedullary haematopoiesis in the adrenal glands BMJ case reports; 2020, 13 (9): Address: Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore , India. Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore , India felixjebasingh@msn.com. Department of Pathology, Christian Medical College, Vellore , India.	INT	JUL TO DEC	Endocrinology, Diabetes and Metabolism, Pathology	PMID: 32913070 PMC:7484855
348.	Kurien, A. J., Senthilvelkumar, T., George, J., Kumar, V. and Rebekah, G. Heel lift improves walking ability of persons with traumatic cauda equina syndrome-a pilot experimental study Spinal Cord Ser Cases; 2020, 6 (1): 16 Address: Department of Physical Medicine and Rehabilitation, Christian Medical College, Vellore , Tamil Nadu, India. Department of Physical Medicine and Rehabilitation, Christian Medical College, Vellore , Tamil Nadu, India. sentheel@gmail.com. Department of Biostatistics, Christian Medical College, Vellore , Tamil Nadu, India. STUDY DESIGN: Non-randomized within-subject experimental study. OBJECTIVE: To determine whether the addition of the 1 cm heel lift to the footwear improves the walking ability of the persons with Cauda Equina Syndrome (CES). SETTING: Department of Physical Medicine and Rehabilitation, Christian Medical College , India. METHODS: Fourteen people with bilateral plantar flexor weakness following traumatic CES (mean age 43.7 years) were recruited for the study. Their walking speed, stride length, cadence, and time taken to complete Timed Up and Go (TUG) were measured using footwear with back straps. Then, the 1 cm heel lift was attached to the sole of the footwear. After sufficient practice, all the parameters were reassessed to find out the effectiveness of the heel lift. RESULTS: With the 1 cm heel lift, the participants walked 0.13 m/s (95% CI, 0.08-0.17) faster than their regular footwear. They were able to complete the TUG test 2.6 s (95% CI, 1.4-3.7) earlier than before. There was an increase of 5.2 in. in stride length (95% CI, 2.9-9) and an eight steps increase in cadence (95% CI, 4.9-11.3) observed after the heel lift. CONCLUSIONS: This pilot study has demonstrated that addition of 1 cm heel may be effective in improving the walking performance of persons with Cauda Equina Syndrome. Future studies should investigate the kinetic and kinematic changes of this modification using a randomized controlled trial study design.	INT	JAN TO JUN	Physical medicine and Rehabilitation, Biostatistics	PMID:32184382 PMC ID: PMC7078180 SCOPUS H-INDEX:1 IF: 1.898 BIOXBIO (2018/2019)
349.	Kurien, N. A., Peter, J. and Jacob, P.	INT	JAN TO JUN	0	PMID:32395048

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Spectrum of Ocular Injuries and Visual Outcome Following Firework Injury to the Eye J Emerg Trauma Shock; 2020, 13 (1): 39-44</p> <p>Address: Department of Ophthalmology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND: Ocular injury due to fireworks requires urgent ophthalmic assessment and management to preserve vision. METHODS: Spectrum of injury, type of intervention, visual outcome, and reasons for visual loss were assessed in consecutive patients presenting over 2 years with firework-related eye injury. The final visual outcome was recorded as best-corrected visual acuity. RESULTS: In the 96 patients (75 males) enrolled, 122 eyes were involved. Twenty-six patients had bilateral eye injury. The median (interquartile) age was 14 (8, 28.5) years. Injuries occurred during Diwali festival (59.4%) and funeral processions (20.8%); over half (53.8%) were bystanders. Injury was due to negligence (78%), device malfunction (12.5%), and attempts to reignite (5.2%) or recover failed device (4.2%). Presenting symptoms were redness (100%), pain (97%), watering (86%), and reduced vision (77%). Facial laceration, contusion, or hematoma occurred in 13 patients. The most frequent adnexal and ocular surface injuries were lid burns (57.3%), edema (44.2%), charred eyelashes (24.6%), and laceration (13.9%). Open-globe injury occurred in 8 eyes. Common anterior segment injuries were corneal epithelial defect (51.6%) and hyphema (20.5%). Posterior segment injuries included commotio retinae (13.1%) and Berlin's edema (7.4%). Surgical treatment was required in 15 eyes; 107 (88%) were managed conservatively. At study completion, of the 99 eyes evaluated, 21 had reduced visual acuity (<6/6) including 7 with monocular blindness. Factors associated with poor vision were open-globe injury (P < 0.001) and poor initial visual acuity (P = 0.05). CONCLUSIONS: Open-globe injury and poor visual acuity at presentation predict the final visual outcome. Monocular blindness following firecracker injury is common.</p>				<p>PMC ID: PMC7204946 H-INDEX:25 IF: 0.560 RG (2018/2019)</p>
350.	<p>Kurien, R., Mehan, R., Varghese, L., Telugu, R. B., Thomas, M. and Rupa, V. Frontoethmoidal Extranasopharyngeal Angiofibroma With Orbital Pyocele Ear Nose Throat J; 2020, 145561320972600</p> <p>Address: Department of Otorhinolaryngology, Christian Medical College, Vellore, India. Department of Pathology, Christian Medical College, Vellore, India.</p> <p>Significance Statement Extranasopharyngeal angiofibromas (ENA) are rare vascular tumors that do not conform to the clinical characteristics of typical nasopharyngeal angiofibromas. We present the management of an angiofibroma in a rare site, within the frontal sinus with a concomitant orbital pyocele, which was completely excised via an endoscopic approach. ENAs should be considered as a differential diagnosis in patients with sinonasal mass and epistaxis. Awareness of this rare entity will avoid radical surgery thus decreasing postoperative morbidity.</p>	INT	JUL TO DEC	Otorhinolaryngology, Pathology	PMID: 33226849

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
351.	<p>Kute, V., Guleria, S., Prakash, J., Shroff, S., Prasad, N., Agarwal, S. K., Varughese, S., Gupta, S., Ag, K. Gokhale, Sahay, M., Sharma, A., Varma, P., Bhalla, A., Vardhan, H., Balwani, M., Dave, S., Bhadauria, D., Rathi, M., Agarwal, D., Shah, P., Ramesh, V. and Garg, R.</p> <p>NOTTO Transplant Specific Guidelines with Reference to COVID-19 Indian J Nephrol; 2020, 30 (4): 215-220</p> <p>Address: Department of Nephrology, Institute of Kidney Diseases and Research Center and Dr. H L Trivedi Institute of Transplantation Sciences (IKDRC-ITS), Ahmedabad, Gujarat, India. Department of Transplantation Surgery, Apollo Hospital, New Delhi, India. Banaras Hindu University, Varanasi, Utter Pradesh, India. MOHAN Foundation, Chennai, India. Department of Nephrology, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, Utter Pradesh, India. Department of Nephrology, All India Institute of Medical Sciences, New Delhi, India. Department of Nephrology, Christian Medical College, Vellore, Tamil Nadu, India. Department of liver transplant surgery, Max Center of Liver and Biliary Sciences at Max Hospital, Saket, New Delhi, India. Department of Heart & Lung Transplant Apollo Hospitals, Jubilee Hills, Hyderabad, Telangana, India. Department of Nephrology, Osmania Medical College, Hyderabad, Telangana, India. Department of Transplant Surgery, The Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India. Department of Nephrology, Venkateshwar Hospital, New Delhi, India. Department of Nephrology, Sir Ganga Ram Hospital, New Delhi, India. Department of Nephrology, Indira Gandhi Institute of Medical Science, Patna, Bihar, India. Department of Nephrology, Jawaharlal Nehru Medical College, Sawangi, Wardha, Maharashtra, India. Department of Pathology, IKDRC-ITS, Ahmedabad, Gujarat, India. Department of Nephrology, SGPGI, Lucknow, Utter Pradesh, India. Department of Nephrology, PGIMER, Chandigarh, India. Department of Nephrology, SMS Hospital, Jaipur, Rajasthan, India. Department of Nephrology, IKDRC-ITS, Ahmedabad, Gujarat, India. National Organ and Tissue Transplant Organization, Department of Surgery, VMMC and Safdarjung Hospital, New Delhi, India. Director General Health Services, Ministry of Health and Family Welfare, Nirman Bhawan, New Delhi, India</p>	NAT	JUL TO DEC	Nephrology	<p>PMID:33273783 PMC ID:7699665</p>
352.	Lal, A., Tharyan, A. and Tharyan, P.	INT	JAN TO JUN	Psychiatry	PMID:31924391

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>The prevalence, determinants and the role of empathy and religious or spiritual beliefs on job stress, job satisfaction, coping, burnout, and mental health in medical and surgical faculty of a teaching hospital: A cross-sectional survey Rev Med Interne; 2020, 41 (4): 232-240</p> <p>Address: Division of Pulmonary and Critical Care Medicine, Mayo Clinic, 55902 Rochester, MN, USA. Electronic Address: manavamos@gmail.com. Department of Psychiatry, Christian Medical College, 632002 Vellore, Tamil Nadu, India.</p> <p>OBJECTIVE: Systematically ascertained data on job stress and burnout and their antecedents and mediators in health professionals from low- and middle-income countries are scant. METHODS: This cross sectional survey, conducted from July 2007 to August 2008, of consenting medical and surgical faculty of a large, charitable, teaching hospital aimed to evaluate: 1) the prevalence and sources of job stress and job satisfaction, and the ways used to cope with stress; 2) the prevalence of burnout and mental distress; and 3) the influence of age, gender, empathy and religious or spiritual beliefs on job stress, satisfaction, mental health and burnout. RESULTS: Of 345 respondents, high job stress on the Physician Stress and Satisfaction questionnaire were reported by 23%. However, 98% of faculty reported high levels of job satisfaction with deriving intellectual stimulation from teaching and a high level of responsibility identified as important contributory sources. Significantly more respondents aged <45 years compared to older faculty achieved moderate or high scores on Emotional Exhaustion and Depersonalization. General Health Questionnaire-12 scores suggested psychiatric morbidity in 21%, particularly in younger faculty. High job stress was associated with high scores for Emotional Exhaustion and Depersonalization. High scores on the Jefferson Scale of Physician Empathy correlated with high scores of Emotional Exhaustion. Religious or spiritual beliefs strongly influencing attitudes to work were significantly associated with high levels of Personal Accomplishment. CONCLUSIONS: This study provides data that will inform the design and implementation of interventions to reduce job stress and burnout and improve retention of faculty.</p>				<p>WOS:000527877000003 SCOPUS H-INDEX:35 IF: 0.810 BIOXBIO (2018/2019)</p>
353.	<p>Lambert, V., Boylan, P., Boran, L., Hicks, P., Kirubakaran, R., Devane, D. and Matthews, A. Virtual reality distraction for acute pain in children The Cochrane database of systematic reviews; 2020, 10 CD010686 Address: School of Nursing, Psychotherapy and Community Health, Dublin City University, Dublin, Ireland. School of Psychology, Dublin City University, Dublin, Ireland. Centre for Innovative Human Systems, School of Psychology, Trinity College Dublin, Dublin, Ireland. Cochrane South Asia, Prof. BV Moses Centre for Evidence-Informed Healthcare and Health Policy, Christian Medical College, Vellore, India. School of Nursing and Midwifery, National University of Ireland Galway, Galway,</p>	INT	JUL TO DEC	Cochrane South Asia	PMID: 33089901

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Ireland.</p> <p>BACKGROUND: Virtual reality (VR) computer technology creates a simulated environment, perceived as comparable to the real world, with which users can actively interact. The effectiveness of VR distraction on acute pain intensity in children is uncertain. OBJECTIVES: To assess the effectiveness and adverse effects of virtual reality (VR) distraction interventions for children (0 to 18 years) with acute pain in any healthcare setting. SEARCH METHODS: We searched CENTRAL, MEDLINE, Embase, CINAHL, PsycINFO and four trial registries to October 2019. We also searched reference lists of eligible studies, handsearched relevant journals and contacted study authors. SELECTION CRITERIA: Randomised controlled trials (RCTs), including cross-over and cluster-RCTs, comparing VR distraction to no distraction, non-VR distraction or other VR distraction. DATA COLLECTION AND ANALYSIS: We used standard Cochrane methodological processes. Two reviewers assessed risk of bias and extracted data independently. The primary outcome was acute pain intensity (during procedure, and up to one hour post-procedure). Secondary outcomes were adverse effects, child satisfaction with VR, pain-related distress, parent anxiety, rescue analgesia and cost. We used GRADE and created 'Summary of findings' tables. MAIN RESULTS: We included 17 RCTs (1008 participants aged four to 18 years) undergoing various procedures in healthcare settings. We did not pool data because the heterogeneity in population (i.e. diverse ages and developmental stages of children and their different perceptions and reactions to pain) and variations in procedural conditions (e.g. phlebotomy, burn wound dressings, physical therapy sessions), and consequent level of pain experienced, made statistical pooling of data impossible. We narratively describe results. We judged most studies to be at unclear risk of selection bias, high risk of performance and detection bias, and high risk of bias for small sample sizes. Across all comparisons and outcomes, we downgraded the certainty of evidence to low or very low due to serious study limitations and serious or very serious indirectness. We also downgraded some of the evidence for very serious imprecision. 1: VR distraction versus no distraction Acute pain intensity: during procedure Self-report: one study (42 participants) found no beneficial effect of non-immersive VR (very low-certainty evidence). Observer-report: no data. Behavioural measurements (observer-report): two studies, 62 participants; low-certainty evidence. One study (n = 42) found no beneficial effect of non-immersive VR. One study (n = 20) found a beneficial effect favouring immersive VR. Acute pain intensity: post-procedure Self-report: 10 studies, 461 participants; very low-certainty evidence. Four studies (n = 95) found no beneficial effect of immersive and semi-immersive or non-immersive VR. Five studies (n = 357) found a beneficial effect favouring immersive VR. Another study (n = 9) reported less pain in the VR group. Observer-report: two studies (216 participants; low-certainty evidence) found a beneficial effect of immersive VR, as reported by primary caregiver/parents or nurses. One study (n = 80) found a beneficial effect of immersive VR, as reported by researchers. Behavioural measurements (observer-report): one study (42 participants) found no beneficial effect of non-immersive VR</p>				

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	<p>(very low-certainty evidence). Adverse effects: five studies, 154 participants; very low-certainty evidence. Three studies (n = 53) reported no adverse effects. Two studies (n = 101) reported mild adverse effects (e.g. nausea) in the VR group. 2: VR distraction versus other non-VR distraction Acute pain intensity: during procedure Self-report, observer-report and behavioural measurements (observer-report): two studies, 106 participants: Self-report: one study (n = 65) found a beneficial effect favouring immersive VR and one (n = 41) found no evidence of a difference in mean pain change scores (very low-certainty evidence). Observer-report: one study (n = 65) found a beneficial effect favouring immersive VR and one (n = 41) found no evidence of a difference in mean pain change scores (low-certainty evidence). Behavioural measurements (observer-report): one study (n = 65) found a beneficial effect favouring immersive VR and one (n = 41) reported a difference in mean pain change scores with fewer pain behaviours in VR group (low-certainty evidence). Acute pain intensity: post-procedure Self-report: eight studies, 575 participants; very low-certainty evidence. Two studies (n = 146) found a beneficial effect favouring immersive VR. Two studies (n = 252) reported a between-group difference favouring immersive VR. One study (n = 59) found no beneficial effect of immersive VR versus television and Child Life non-VR distraction. One study (n = 18) found no beneficial effect of semi-immersive VR. Two studies (n = 100) reported no between-group difference. Observer-report: three studies, 187 participants; low-certainty evidence. One study (n = 81) found a beneficial effect favouring immersive VR for parent, nurse and researcher reports. One study (n = 65) found a beneficial effect favouring immersive VR for caregiver reports. Another study (n = 41) reported no evidence of a difference in mean pain change scores. Behavioural measurements (observer-report): two studies, 106 participants; low-certainty evidence. One study (n = 65) found a beneficial effect favouring immersive VR. Another study (n = 41) reported no evidence of a difference in mean pain change scores. Adverse effects: six studies, 429 participants; very low-certainty evidence. Three studies (n = 229) found no evidence of a difference between groups. Two studies (n = 141) reported no adverse effects in VR group. One study (n = 59) reported no beneficial effect in reducing estimated cyber-sickness before and after VR immersion. 3: VR distraction versus other VR distraction We did not identify any studies for this comparison. AUTHORS' CONCLUSIONS: We found low-certainty and very low-certainty evidence of the effectiveness of VR distraction compared to no distraction or other non-VR distraction in reducing acute pain intensity in children in any healthcare setting. This level of uncertainty makes it difficult to interpret the benefits or lack of benefits of VR distraction for acute pain in children. Most of the review primary outcomes were assessed by only two or three small studies. We found limited data for adverse effects and other secondary outcomes. Future well-designed, large, high-quality trials may have an important impact on our confidence in the results.</p>				
354.	Laxminarayan, R. and John, T. J. Is Gradual and Controlled Approach to Herd Protection a Valid Strategy to Curb the	NAT	JAN TO JUN	Clinical Virology	PMID:32376793 PMC:7340759

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>COVID-19 Pandemic? Indian Pediatr; 2020, 57 (6): 505-507</p> <p>Address: Centre for Disease Dynamics, Economics and Policy, Washington DC and Senior Research Scholar, Princeton University, United States. ramanan@cddep.org Retired Professor, Department of Clinical Virology, Christian Medical College, Vellore, India.</p>				<p>SCOPUS H-INDEX:49 IF: 1.163 BIOXBIO (2018/2019)</p>
355.	<p>Lazaryan, A., Dolan, M., Zhang, M. J., Wang, H. L., Kharfan-Dabaja, M. A., Marks, D. I., Bejanyan, N., Copelan, E., Majhail, N. S., Waller, E. K., Chao, N., Prestidge, T., Nishihori, T., Kebriaei, P., Inamoto, Y., Hamilton, B., Hashmi, S. K., Kamble, R. T., Bacher, U., Hildebrandt, G. C., Stiff, P. J., McGuirk, J., Aldoss, I., Beitinjaneh, A. M., Muffy, L., Vij, R., Olsson, R. F., Byrne, M., Schultz, K. R., Aljurf, M., Seftel, M., Savoie, M. L., Savani, B. N., Verdonck, L. F., Cairo, M. S., Hossain, N., Bhatt, V. R., Frangoul, H. A., Abdel-Azim, H., Al Malki, M., Munker, R., Rizzieri, D., Khera, N., Nakamura, R., Ringden, O., Van Der Poel, M., Murthy, H. S., Liu, H. T., Mori, S., De Oliveira, S., Bolanos-Meade, J., Elsayy, M., Barba, P., Nathan, S., George, B., Pawarode, A., Grunwald, M., Agrawal, V., Wang, Y. J., Assal, A., Caro, P. C., Kuwatsuka, Y., Seo, S., Ustun, C., Politikos, I., Lazarus, H. M., Saber, W., Sandmaier, B. M., De Lima, M., Litzow, M., Bachanova, V., Weisdorf, D. and Acute Leukemia Comm, Cibmtr Impact of cytogenetic abnormalities on outcomes of adult Philadelphia-negative acute lymphoblastic leukemia after allogeneic hematopoietic stem cell transplantation: a study by the Acute Leukemia Working Committee of the Center for International Blood and Marrow Transplant Research Haematologica; 2020, 105 (5): 1329-1338</p> <p>Address: [Lazaryan, Aleksandr] H Lee Moffitt Canc Ctr & Res Inst, Tampa, FL 33612 USA. [Dolan, Michelle] Univ Minnesota, Med Ctr, Minneapolis, MN 55455 USA. [Zhang, Mei-Jie; Wang, Hai-Lin; Saber, Wael] Med Coll Wisconsin, CIBMTR, Dept Med, Milwaukee, WI 53226 USA. [Zhang, Mei-Jie] Med Coll Wisconsin, Inst Hlth & Equ, Div Biostat, Milwaukee, WI 53226 USA. [Kharfan-Dabaja, Mohamed A.] Mayo Clin, Blood & Marrow Transplant Program, Div Hematol Oncol, Jacksonville, FL 32224 USA. [Marks, David, I] Univ Hosp Bristol NHS Trust, Adult Bone Marrow Transplant, Bristol, Avon, England. [Bejanyan, Nelli] H Lee Moffitt Canc Ctr & Res Inst, Dept Blood & Marrow Transplant & Cellular Immunot, Tampa, FL USA. [Copelan, Edward] Carolinas HealthCare Syst, Atrium Hlth, Levine Canc Inst, Charlotte, NC USA. [Majhail, Navneet S.; Hamilton, Betty] Cleveland Clin, Taussig Canc Inst, Blood & Marrow Transplant Program, Cleveland, OH 44106 USA. [Waller, Edmund K.] Emory Univ, Winship Canc Inst, Dept Hematol & Med Oncol, Atlanta, GA 30322 USA. [Chao, Nelson] Duke Univ, Med Ctr, Dept Med, Div Cell Therapy & Hematol, Durham, NC 27710 USA. [Prestidge, Tim] Starship Childrens Hosp, Blood & Canc Ctr, Auckland, New Zealand. [Nishihori, Taiga] H Lee Moffitt Canc Ctr & Res Inst, Dept Blood & Marrow Transplantat, Tampa, FL USA. [Kebriaei, Partow] Univ</p>	INT	JAN TO JUN	Clinical Haematology	<p>WOS:000530645400037 SCOPUS H-INDEX:136 IF: 7.570 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Texas MD Anderson Canc Ctr, Dept Stem Cell Transplantat, Div Canc Med, Houston, TX 77030 USA. [Inamoto, Yoshihiro] Natl Canc Ctr, Div Hematopoiect Stem Cell Transplantat, Tokyo, Japan. [Hashmi, Shahrukh K.] Mayo Clin, Dept Internal Med, Rochester, MN USA. [Hashmi, Shahrukh K.; Aljurf, Mahmoud] King Faisal Specialist Hosp & Res Ctr, Oncol Ctr, Riyadh, Saudi Arabia. [Kamble, Rammurti T.] Baylor Coll Med, Ctr Cell & Gene Therapy, Div Hematol & Oncol, Houston, TX 77030 USA. [Bacher, Ulrike] Bern Univ Hosp, Inselspital, Dept Hematol, Bern, Switzerland. [Hildebrandt, Gerhard C.] Univ Kentucky, Markey Canc Ctr, Lexington, KY USA. [Stiff, Patrick J.] Loyola Univ Med Ctr, Maywood, IL 60153 USA. [McGuirk, Joseph] Univ Kansas, Med Ctr, Westwood, KS USA. [Aldoss, Ibrahim; Al Malki, Monzr] City Hope Natl Med Ctr, Comprehens Canc Ctr, Duarte, CA USA. [Beitinjaneh, Amer M.] Univ Miami, Miami, FL USA. [Muffly, Lori] Stanford Univ, Div Blood & Marrow Transplantat, Stanford, CA 94305 USA. [Vij, Ravi] Washington Univ, Sch Med, Div Hematol & Oncol, St Louis, MO USA. [Olsson, Richard F.] Karolinska Inst, Dept Lab Med, Stockholm, Sweden. [Olsson, Richard F.] Uppsala Univ, Ctr Clin Res Sormland, Uppsala, Sweden. [Byrne, Michael] Vanderbilt Univ, Med Ctr, Nashville, TN USA. [Schultz, Kirk R.] Univ British Columbia, British Columbias Childrens Hosp, Dept Pediat Hematol Oncol & Bone Marrow Transplan, Vancouver, BC, Canada. [Seftel, Matthew] CancerCare Manitoba, Dept Med Oncol & Hematol, Winnipeg, MB, Canada. [Savoie, Mary Lynn] Tom Baker Canc Clin, Calgary, AB, Canada. [Savani, Bipin N.] Vanderbilt Univ, Med Ctr, Dept Med, Div Hematol Oncol, Nashville, TN USA. [Verdonck, Leo F.] Isala Clin, Dept Hematol Oncol, Zwolle, Netherlands. [Cairo, Mitchell S.] New York Med Coll, Dept Pediat, Div Pediat Hematol Oncol & Stem Cell Transplantat, Valhalla, NY 10595 USA. [Hossain, Nasheed] Loyola Univ Chicago, Stritch Sch Med, Maywood, IL USA. [Bhatt, Vijaya Raj] Univ Nebraska Med Ctr, Fred & Pamela Buffett Canc Ctr, Omaha, NE USA. [Frangoul, Haydar A.] Childrens Hosp TriStar Centennial, Nashville, TN USA. [Frangoul, Haydar A.] Sarah Cannon Res Inst, Nashville, TN USA. [Abdel-Azim, Hisham] Univ Southern Calif, Keck Sch Med, Childrens Hosp Los Angeles, Div Hematol Oncol & Blood & Marrow Transplantat, Los Angeles, CA 90007 USA. [Munker, Reinhold] Louisiana State Univ Hlth Shreveport, Dept Internal Med, Sect Hematol Oncol, Shreveport, LA USA. [Rizzieri, David] Duke Univ, Div Hematol Malignancies & Cellular Therapy, Durham, NC USA. [Khera, Nandita] Mayo Clin, Dept Hematol Oncol, Phoenix, AZ USA. [Nakamura, Ryotaro] City Hope Natl Med Ctr, Dept Hematol & Hematopoiect Cell Transplantat, Duarte, CA USA. [Ringden, Olle] Karolinska Inst, CLINTEC Clin Sci Intervent & Technol, Translat Cell Therapy Grp, Stockholm, Sweden. [van der Poel, Marjolein] Acad Ziekenhuis Maastricht, Maastricht, Netherlands. [Murthy, Hemant S.] Mayo Clin Florida, Jacksonville, FL USA. [Liu, Hongtao] Univ Chicago Med, Chicago, IL USA. [Mori, Shahram] Florida Hosp Med Grp, Blood & Marrow Transplant Ctr, Orlando, FL USA. [De Oliveira, Satiro] UCLA, Med Ctr, Los Angeles, CA 90024 USA. [Bolanos-Meade, Javier] Sidney Kimmel Comprehens Canc Ctr Johns Hopkins B, Baltimore, MD USA. [Elsawy, Mahmoud] Dalhousie Univ, QE II Hlth Sci Ctr, Halifax, NS, Canada. [Barba, Pere] Hosp Valle De Hebron, Barcelona, Spain. [Nathan, Sunita] Rush Univ, Med Ctr, Chicago, IL 60612 USA. [George, Biju] Christian Med Coll & Hosp,</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Vellore, Tamil Nadu, India. [Pawarode, Attaphol] Univ Michigan, Dept Internal Med, Div Hematol Oncol, Med Sch, Blood & Marrow Transplant Program, Ann Arbor, MI USA. [Grunwald, Michael] Atrium Hlth, Levine Canc Inst, Dept Hematol Oncol & Blood Disorders, Charlotte, NC USA. [Agrawal, Vaibhav] Indiana Univ Sch Med, Div Hematol Oncol, Indianapolis, IN 46202 USA. [Wang, Youjin] NCI, Rockville, MD USA. [Assal, Amer] Columbia Univ, Med Ctr, New York Presbyterian Hosp, New York, NY USA. [Caro, Paul Castillo] UF Hlth Shands Childrens Hosp, Gainesville, FL USA. [Kuwatsuka, Yachiyo] Nagoya Univ Hosp, Dept Adv Med, Nagoya, Aichi, Japan. [Seo, Sachiko] Dokkyo Med Univ, Dept Hematol & Oncol, Mibu, Tochigi, Japan. [Ustun, Celalettin] Rush Univ, Div Hematol Oncol Cell Therapy, Chicago, IL 60612 USA. [Politikos, Ioannis] Mem Sloan Kettering Canc Ctr, 1275 York Ave, New York, NY 10021 USA. [Lazarus, Hillard M.] Case Western Reserve Univ, Cleveland, OH 44106 USA. [Sandmaier, Brenda M.] Univ Washington, Div Med Oncol, Seattle, WA 98195 USA. [Sandmaier, Brenda M.] Fred Hutchinson Canc Res Ctr, Clin Res Div, 1124 Columbia St, Seattle, WA 98104 USA. [De Lima, Marcos] Univ Hosp Case Med Ctr, Seidman Canc Ctr, Dept Med, Cleveland, OH USA. [Litzow, Mark] Mayo Clin Rochester, Div Hematol & Transplant Ctr, Rochester, MN USA. [Bachanova, Veronika] Univ Minnesota, Med Ctr, Blood & Marrow Transplant Program, Minneapolis, MN 55455 USA. [Weisdorf, Daniel] Univ Minnesota, Med Ctr, Dept Med, Div Hematol Oncol & Transplant, Minneapolis, MN 55455 USA.</p> <p>Lazaryan, A (reprint author), H Lee Moffitt Canc Ctr & Res Inst, Tampa, FL 33612 USA. aleksandr.lazaryan@moffitt.org</p> <p>Cytogenetic risk stratification at diagnosis has long been one of the most useful tools to assess prognosis in acute lymphoblastic leukemia (ALL). To examine the prognostic impact of cytogenetic abnormalities on outcomes after allogeneic hematopoietic cell transplantation, we studied 1731 adults with Philadelphia-negative ALL in complete remission who underwent myeloablative or reduced intensity/non-myeloablative conditioning transplant from unrelated or matched sibling donors reported to the Center for International Blood and Marrow Transplant Research. A total of 632 patients had abnormal conventional metaphase cytogenetics. The leukemia-free survival and overall survival rates at 5 years after transplantation in patients with abnormal cytogenetics were 40% and 42%, respectively, which were similar to those in patients with a normal karyotype. Of the previously established cytogenetic risk classifications, modified Medical Research Council-Eastern Cooperative Oncology Group score was the only independent prognosticator of leukemia-free survival (P=0.03). In the multivariable analysis, monosomy 7 predicted post-transplant relapse [hazard ratio (HR)=2.11; 95% confidence interval (95% CI): 1.04-4.27] and treatment failure (HR=1.97; 95% CI: 1.20-3.24). Complex karyotype was prognostic for relapse (HR=1.69; 95% CI: 1.06-2.69), whereas t(8;14) predicted treatment failure (HR=2.85; 95% CI: 1.35-6.02) and overall mortality (HR=3.03; 95% CI: 1.44-6.41). This large study suggested a novel transplant-specific cytogenetic scheme with adverse [monosomy 7, complex karyotype, del(7q), t(8;14), t(11;19), del(7q),</p>				

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	tetraploidy/near triploidy], intermediate (normal karyotype and all other abnormalities), and favorable (high hyperdiploidy) risks to prognosticate leukemia-free survival (P=0.02). Although some previously established high-risk Philadelphia-negative cytogenetic abnormalities in ALL can be overcome by transplantation, monosomy 7, complex karyotype, and t(8;14) continue to pose significant risks and yield inferior outcomes.				
356.	<p>Lijesh, K. U., Gupta, R. D., Senthilraja, M., Kapoor, N., Paul, T. V. and Thomas, N. Exogenous recombinant human insulin-induced severe hypersensitivity reaction precipitating hyperglycemic crisis: A clinical conundrum J Family Med Prim Care; 2020, 9 (8): 4470-4472</p> <p>Address: Department of Endocrinology, Diabetes and Metabolism, Christian Medical College (CMC) Vellore, Tamil Nadu, India.</p> <p>Hypersensitivity reactions against exogenous insulin are a rare clinical entity after the advent of recombinant human insulin; however, there are still case reports wherein patients develop hypersensitivity reactions against insulin. We present the case of a type 1 diabetes mellitus patient who developed type 1 hypersensitivity reaction against subcutaneous insulin. He had recurrent episodes of diabetic ketoacidosis after developing hypersensitivity reactions against insulin, requiring multiple hospital admissions. When he presented to us, he was on both insulin infusion and subcutaneous insulin, requiring a daily insulin dose of about 800 units and having severe insulin hypersensitivity reactions and hyperglycemia. He had multiple subcutaneous erythematous nodules at the insulin injection sites, however, had no evidence of systemic allergy. Investigations revealed eosinophilic leukocytosis, and high IgE levels and skin biopsy showing evidence of insulin hypersensitivity. He was desensitized to insulin according to Heinzerling et al. insulin desensitization protocol and subsequently with immunomodulation therapy using steroids (pulse methylprednisolone) and mycophenolate mofetil as well as by installation of insulin pump.</p>	NAT	JUL TO DEC	Endocrinology, Diabetes and Metabolism	<p>PMID: 33110889 PMC:7586586</p>
357.	<p>Lionel, K., Moorthy, R., Singh, G. and Mariappan, R. Anaesthetic management of craniostoma repair - A retrospective study Indian Journal of Anaesthesia; 2020, 64 (5): 422-425</p> <p>Address: Department of Neuroanaesthesia, Christian Medical College, Vellore, Tamil Nadu, 632 004, India Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, India</p>	NAT	JAN TO JUN	Neuroanaesthesia, Neurological Sciences	<p>SCOPUS H-INDEX:26 IF: 0.170 RG (2018/2019)</p>
358.	<p>Lissitchkov, T., Madan, B., Khayat, C. D., Zozulya, N., Ross, C., Karimi, M., Kavakli, K., De Angulo, G. R., Almomen, A., Subramanian, K., D'souza, F., Viswabandya, A., Hoorfar, H., Schwartz, B. A., Solomon, C., Knaub, S. and Peyvandi, F. Fibrinogen concentrate for treatment of bleeding and surgical prophylaxis in congenital fibrinogen deficiency patients Journal of Thrombosis and Haemostasis; 2020, 18 (4): 815-824</p>	INT	JAN TO JUN	Clinical Haematology	<p>WOS:000508409000001 SCOPUS H-INDEX:165 IF: 4.662 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Address: [Lissitchkov, Toshko] Specialized Hosp Act Treatment SHAT Joan Pavel, Dept Hemorrhag Diathesis & Anemia, Sofia, Bulgaria. [Madan, Bella] Guys & St Thomas NHS Fdn Trust, Ctr Haemostasis & Thrombosis, London, England. [Khayat, Claudia Djambas] Hotel Dieu De France, Beirut, Lebanon. [Zozulya, Nadezhda] Minist Healthcare Russian Federat, Fed State Funded Inst, Natl Res Ctr Hematol, Moscow, Russia. [Ross, Cecil; D'Souza, Fulton] St Johns Med Coll & Hosp, Dept Hematol, Bangalore, Karnataka, India. [Karimi, Mehran] Dastgheib Hosp, Shiraz, Iran. [Kavakli, Kaan] Ege Univ, Childrens Hosp, Izmir, Turkey. [De Angulo, Guillermo R.] Miami Childrens Hosp, Miami, FL USA. [Almomen, Abdulkareem] King Saud Univ, Coll Med, Ctr Excellence Thrombosis & Hemostasis, Riyadh, Saudi Arabia. [Subramanian, Kannan] Sahyadri Specialty Hosp, Pune, Maharashtra, India. [Viswabandya, Auro] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Hoorfar, Hamid] Seyed Al Shohada Hosp, Esfahan, Iran. [Schwartz, Bruce A.] Octapharma, Clin Res & Dev, Hoboken, NJ USA. [Solomon, Cristina; Knaub, Sigurd] Octapharma, Res & Dev Dept, Lachen, Switzerland. [Peyvandi, Flora] Fdn IRCCS Ca Granda Osped Maggiore Policlin, Angelo Bianchi Bon Hemophilia & Thrombosis Ctr, Milan, Italy. [Peyvandi, Flora] Univ Milan, Dept Pathophysiol & Transplantat, Milan, Italy.</p> <p>Peyvandi, F (reprint author), Univ Milan, Dept Pathophysiol & Transplantat, Milan, Italy. flora.peyvandi@unimi.it</p> <p>Background Congenital fibrinogen deficiency is an ultra-rare disorder in which patients can experience severe and/or frequent bleeding episodes (BEs). Here, we present the largest prospective study to date on the treatment of this disorder. Methods Hemostatic efficacy of human fibrinogen concentrate (HFC; FIBRYGA (R), Octapharma AG) for treatment of bleeding or surgical prophylaxis was assessed by investigators and adjudicated by an independent data monitoring and endpoint adjudication committee (IDMEAC) according to a four-point scale, using objective criteria. Thromboelastometry maximum clot firmness (MCF) was also determined. Results Twenty-five afibrinogenemia patients were treated with HFC: 24 for on-demand treatment of 89 BEs, and nine as prophylaxis for 12 surgeries. For BEs, treatment success (rating of excellent or good) evaluated by investigators was 96.6% (90% confidence interval [CI], 0.92-0.99; two missing ratings, classified as failures) and by the IDMEAC was 98.9% (90% CI, 0.95-0.999). Mean +/- standard deviation (SD) increase in MCF was 5.8 +/- 2.5 mm one hour after the first HFC infusion (mean +/- SD dose, 61.88 +/- 11.73 mg/kg). For the 12 surgeries (median [range] HFC dose/surgery, 85.80 mg/kg [34.09-225.36]), intraoperative and postoperative treatment success were both rated 100% (90% CI, 0.82-1.00) by investigators and the IDMEAC. Three adverse events were possibly treatment related, including a moderate case of thrombosis. There were no deaths, no severe allergic or hypersensitivity reactions, and no clinical evidence of neutralizing antifibrinogen antibodies. Conclusions Human fibrinogen concentrate was efficacious for on-demand treatment of bleeding and as surgical prophylaxis, with</p>				

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	a favorable safety profile, in patients with congenital afibrinogenemia.				
359.	<p>Loganathan, A. K., Barla, S. S. Rk and Kurian, J. J. Unusual variant of pseudo prune belly syndrome BMJ case reports; 2020, 13 (10): Address: Paediatric Surgery, Christian Medical College and Hospital Vellore, Chennai, Tamil Nadu, India. Paediatric Surgery, Christian Medical College and Hospital Vellore, Chennai, Tamil Nadu, India jujjacobkurian@gmail.com.</p> <p>Unilateral pseudo prune belly syndrome (PPBS) is a rare variant with only two other cases found in the main literature until. We present a 9-month old boy with left-sided lax abdominal wall, undescended testes and major vesicoureteric reflux involving only the left side. He underwent left orchidopexy and left end ureterostomy followed by left nephrectomy. Unilateral variant supports the theory of mesodermal arrest as a cause for prune belly syndrome. Treatment is individualised and prognosis is relatively better when compared with other variants of PPBS.</p>	INT	JUL TO DEC	Paediatric Surgery	PMID: 33127698 PMC:7604793
360.	<p>Lohanathan, A., Hazra, D., Jyothirmayi, C. A. and Kundavaram, A. P. An Elucidation of Pattern of Injuries in Patients with Fall from Height Indian J Crit Care Med; 2020, 24 (8): 683-687 Address: Department of Accident and Emergency Medicine, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Department of Pediatrics, Christian Medical College and Hospital, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND: Fall from height (FFH) is the second most common cause of trauma presenting to the emergency department (ED). They account for majority of the polytrauma cases. This study was done to determine the pattern of injuries sustained due to FFH and outcome. MATERIALS AND METHODS: This was a retrospective observational study of all patients with history of FFH presenting to the ED of a large tertiary care hospital in South India. Details of the incident, fall height, injuries, and outcome were noted and analyzed. RESULTS: This study cohort included 861 patients with a mean age was 36.2 (SD 20.8) years. A male predominance (74%) was noted. Majority of the patients, i.e., 62%, were triaged as priority 2, depending on the hemodynamic stability. Approximately a quarter (26%) sustained injury to the lower limbs with 18% sustaining spinal cord injury (SCI). Among the patients suffering SCI (35%), patients were further categorized in the American Spinal cord Injury Association (ASIA) classification. New Injury Severity Score (NISS) was more than 8 in 47% of the total study population. Majority of the patients, i.e., 62%, were discharged stable from ED after primary care with a plan of follow-up in the outpatient department. One-third (30%) of the total patients required hospital admission and among them 20% of the patients had to undergo major surgical intervention. The rest were either discharged stable or left against medical advice (LAMA) after primary care. The in-hospital mortality rate was 1.04%. CONCLUSION: This study has expressed the pattern of injuries in patients with FFH. An alarmingly high number of young adults with significant</p>	NAT	JUL TO DEC	Accident and Emergency Medicine, Pediatrics	PMID: 33024375 PMC:7519599

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	lower limbs and spinal injuries were noted. We observed that with increase in fall height there was a proportional increase in SCI and decrease in lower limb injuries. HOW TO CITE THIS ARTICLE: Lohanathan A, Hazra D, Jyothirmayi CA, Kundavaram AP. An Elucidation of Pattern of Injuries in Patients with Fall from Height. Indian J Crit Care Med 2020;24(8):683-687.				
361.	<p>Lord, A. C., D'souza, N., Shaw, A., Rokan, Z., Moran, B., Abulafi, M., Rasheed, S., Chandramohan, A., Corr, A., Chau, I. and Brown, G.</p> <p>MRI-Diagnosed Tumour Deposits and EMVI Status Have Superior Prognostic Accuracy to Current Clinical TNM Staging in Rectal Cancer</p> <p>Ann Surg; 2020, Address: Royal Marsden NHS Foundation Trust, London, UK. Croydon University Hospital, London, UK. Imperial College London, UK. Hampshire Hospitals NHS Foundation Trust, Basingstoke, UK. Christian Medical College and Hospital, Vellore, India. St Marks Hospital, London, UK.</p> <p>BACKGROUND DATA: MRI assessment of rectal cancer not only assesses tumour depth and surgical resectability but also extramural disease which affects prognosis. We have observed that non-nodal tumour nodules (tumour deposits; mrTDs) have a distinct MRI appearance compared to lymph node metastases (mrLNMs). OBJECTIVE: We aimed to assess whether mrTDs and mrLNMs have different prognostic implications and compare these to other known prognostic markers. METHODS: This was a retrospective cohort study of 233 patients undergoing resection for rectal cancer from January 2007-October 2015. Data were obtained from electronic records and MRIs blindly re-reported. Survival was determined using Kaplan-Meier method. Prognostic markers were evaluated using Cox regression and competing risks analysis. Inter-observer agreement for mrTD was measured using Cohen's Kappa. RESULTS: On multivariable analysis, baseline mrTD/mrEMVI (extramural venous invasion) status was the only significant MRI factor for adverse survival (HR 2.36 (1.54-3.61) for OS, 2.37 (1.47-3.80) for DFS (both p < 0.001), superseding T and N categories. mrLNMs were associated with good prognosis (HR 0.50 (0.31-0.80)p= 0.004 for OS, 0.60 (0.40-0.90)p = 0.014 for DFS). On multivariable analysis, mrTDs/mrEMVI were strongly associated with distant recurrence (HR 6.53 (2.52-16.91) p= < 0.001) whereas T and N category were not. In a subgroup analysis of post-treatment MRIs in post-chemoradiotherapy (CRT) patients, mrTD/mrEMVI status was again the only significant prognostic factor; furthermore those who showed a good treatment response had a prognosis similar to patients who were negative at baseline. Inter-observer agreement for detection of mrTDs was κ0.77 and κ0.83. CONCLUSION: Current MRI staging predicting T and N status does not adequately predict prognosis. Positive mrTD/mrEMVI status has greater prognostic accuracy and would be superior in determining treatment and follow-up protocols. CRT may be a highly effective treatment strategy in mrTD/mrEMVI positive patients.</p>	INT	JUL TO DEC	Radiology	PMID: 32941279
362.	Lotfaliany, M., Sathish, T., Shaw, J., Thomas, E., Tapp, R. J., Kapoor, N., Thankappan,	INT	JAN TO JUN	Endocrinology	SCOPUS

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>K. R. and Oldenburg, B. Effects of a lifestyle intervention on cardiovascular risk among high-risk individuals for diabetes in a low- and middle-income setting: Secondary analysis of the Kerala Diabetes Prevention Program Preventive Medicine; 2020, Address: Melbourne School of Population and Global Health, University of Melbourne, Australia Baker Heart and Diabetes Institute, Melbourne, Australia Achutha Menon Centre for Health Science Studies, Sree Chitra Tirunal Institute for Medical Sciences and Technology, India WHO Collaborating Centre on Implementation Research for Prevention & Control of NCDs, University of Melbourne, Australia School of Biomedical Engineering and Imaging Sciences, Kings College London, United Kingdom Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore, India Population Health Research Institute, McMaster University, Hamilton, Canada Centre for Online Health, Centre for Health Services Research, University of Queensland, Australia Department of Public Health and Community Medicine, Central University of Kerala, Kasaragod, Kerala, India</p> <p>We aimed to examine whether a lifestyle intervention was effective in reducing cardiovascular disease (CVD) risk in individuals at high-risk of developing diabetes in a low- and middle-income setting. The Kerala Diabetes Prevention Program was evaluated by a cluster-randomized controlled trial (2013–2016) of 1007 individuals (aged 30–60 years) at high-risk for diabetes (Indian Diabetes Risk Score \geq 60 and without diabetes) in Kerala state, India. Sixty polling areas in Kerala were randomized to intervention or control groups by an independent statistician using a computer-generated randomization sequence. Participants from 30 intervention communities received a 12-month structured peer-support lifestyle intervention program involving 15 group sessions and linked community activities, aimed at supporting and maintaining lifestyle change. The primary outcome for this analysis was the predicted 10-year CVD risk at two years, assessed using the Framingham Risk Score. The mean age at baseline was 46.0 (SD: 7.5) years, and 47.2% were women. Baseline 10-year CVD risk was similar between study groups. The follow-up rate at two years was 95.7%. The absolute risk reduction in predicted 10-year CVD risk between study groups was 0.69% (95% CI: 0.09% to 1.29%, $p=0.024$) at one year and 0.69% (95% CI: 0.10% to 1.29%, $p=0.023$) at two years. The favorable change in CVD risk with the intervention condition was mainly due to the reduction in tobacco use (change index: -0.25, 95% CI: -0.42 to -0.09). Our findings suggest that a community-based peer-support lifestyle intervention could reduce CVD risk in individuals at high-risk of developing diabetes in India. Trial registration: Australia and New Zealand Clinical Trials Registry</p>				<p>H-INDEX:164 IF: 3.449 BIOXBIO (2018/2019)</p>

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	ACTRN12611000262909. © 2020 Elsevier Inc.				
363.	<p>Mackie, I., Mancini, I., Muia, J., Kremer Hovinga, J., Nair, S., Machin, S. and Baker, R. International Council for Standardization in Haematology (ICSH) recommendations for laboratory measurement of ADAMTS13 Int J Lab Hematol; 2020, 42 (6): 685-696</p> <p>Address: Research Haematology, University College London, London, United Kingdom Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Angelo Bianchi Bonomi Hemophilia and Thrombosis Center, Università degli Studi di Milano, Department of Pathophysiology and Transplantation and Fondazione Luigi Villa, Milan, Italy Department of Medicine, Washington University School of Medicine, St Louis, MO, United States Department of Hematology and Central Hematology Laboratory, Inselspital, Bern University Hospital, Bern, Switzerland Transfusion Medicine and Immunohematology, Christian Medical College, Vellore, India Western Australia Centre for Thrombosis and Haemostasis, Perth Blood Institute, Murdoch University, Perth, WA, Australia Department of Biochemistry and Microbiology, Oklahoma State University Center for Health Sciences, Tulsa, OK, United States</p> <p>This guidance document was prepared on behalf of the International Council for Standardization in Haematology (ICSH), by the ADAMTS13 Assay Working Group, which comprises an international group of both clinical and laboratory experts. The document provides recommendations on best practice for the performance of ADAMTS13 assays in clinical laboratories. ADAMTS13 assays support the differential diagnosis of thrombotic microangiopathies and have utility in the management of thrombotic thrombocytopenic purpura (TTP). There are three types of assay: activity, antigen and autoantibody/inhibitor assays. Methods for activity assays differ in terms of sensitivity, specificity, precision and turnaround time. The most widely used assays involve VWF peptide substrates and either chromogenic ELISA or FRET techniques, although chemiluminescence assays and rapid screening tests have recently become available. Tests for autoantibodies and inhibitors allow confirmation of acquired, immune-mediated TTP, while antigen assays may be useful in congenital TTP and as prognostic markers. In this document, we have attempted to describe ADAMTS13 assays and the conditions that affect them, as well as: blood collection, sample processing, quality control, standardization and clinical utility; recognizing that laboratories in different parts of the world have varying levels of sophistication. The recommendations are based on expert opinion, published literature and good clinical laboratory practice. © 2020 The Authors. International Journal of Laboratory Hematology published by John Wiley & Sons Ltd</p>	INT	JUL TO DEC	Transfusion Medicine and Immunohematology	SCOPUS
364.	Maddali, M., Kulkarni, U. P., Ravindra, N., Jajodia, E., Arunachalam, A. K., Suresh, H.,	INT	JAN TO JUN	Clinical Haematology	PMID:32277273

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Venkatraman, A., George, B., Mathews, V. and Balasubramanian, P. JAK2 exon 12 mutations in cases with JAK2V617F-negative polycythemia vera and primary myelofibrosis Ann Hematol; 2020, 99 (5): 983-989</p> <p>Address: Department of Hematology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Hematology, Christian Medical College, Vellore, Tamil Nadu, India. bpoonkuzhali@cmcvellore.ac.in.</p> <p>Molecular detection of JAK2 mutation (V617F or exon 12) is included as a major diagnostic criterion for polycythemia vera (PV) by the WHO 2016 guidelines. JAK2 exon 12 mutations are seen in about 2-5% of JAK2V617F-negative cases of PV. Mutations in JAK2 cause constitutive activation of JAK-STAT pathway which results in variable phenotypes. PV patients with exon 12 mutations in JAK2 present characteristically with erythrocytosis. There are limited reports describing the spectrum of JAK2 exon12 mutations in myeloproliferative neoplasms (MPNs). Here, we describe the characteristics of a series of MPN patients with mutations in exon 12 of JAK2 of which two were novel variants associated with polycythemia. Interestingly, we noted two patients presenting as myelofibrosis having JAK2 exon 12 mutations.</p>				<p>WOS:000524962100001 SCOPUS H-INDEX:77 IF: 2.850 BIOXBIO (2018/2019)</p>
365.	<p>Madhuri, V. and Khan, N. Orthopaedic Women of India: Impediments to Their Growth Indian J Orthop; 2020, 54 (4): 409-410</p> <p>Address: Department of Pediatric Orthopedics, Christian Medical College, Vellore, India. GRID: grid.11586.3b. ISNI: 0000 0004 1767 8969</p>	NAT	JAN TO JUN	Paediatric Orthopaedics	<p>PMID:32549957 PMC ID: PMC7270374 WOS:000537730500001 SCOPUS H-INDEX:28 IF: 0.780 RG (2018/2019)</p>
366.	<p>Madhuri, V., Ramesh, S., Varma, H., Sivadasan, S. B., Sahoo, B., John, A., Fernandez, F., Rajagopal, K., Mathews, V., Balakumar, B., Dinesh, V. D., Chilbule, S. K., Gibikote, S., Srivastava, A. and Bone Defect Study, Group First Report of a Tissue-Engineered Graft for Proximal Humerus Gap Non-union After Chronic Pyogenic Osteomyelitis in a Child: A Case Report JBJS case connector; 2020, 10 (1): e0031</p> <p>Address: Paediatric Orthopaedics unit, Christian Medical College Hospital, Vellore, Tamil Nadu, India Centre for Stem Cell Research, unit of inStem, Christian Medical College, Bagayam, Bengaluru, Tamil Nadu, India Sree Chitra Tirunal Institute for Medical Sciences & Technology, Biomedical Technology Wing, Thiruvananthapuram, Kerala, India</p> <p>CASE: An 11-year-old child who presented with a postseptic gap nonunion of 4 cm in the proximal humerus was treated with a customized hydroxyapatite-tricalcium</p>	INT	JAN TO JUN	Paediatric Orthopaedics, Centre for Stem Cell Research	<p>SCOPUS H-INDEX:6 IF: 0.090 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	phosphate-tricalcium silicate composite (HASi) scaffold loaded with culture-expanded autologous bone marrow-derived mesenchymal stem cells (MSCs) primed into osteogenic lineage. Union occurred at 3 months, and at 3 years, the child had improved joint mobility, with radiographic and computed tomographic imaging evidence of incorporation of the graft. CONCLUSIONS: This case demonstrated the feasibility of MSC directed into osteogenic lineage on HASi to repair a long bone defect owing to postseptic osteomyelitis, a condition notorious for a high failure rate.				
367.	<p>Maki, G., Smith, I., Paulin, S., Kaljee, L., Kasambara, W., Mlotha, J., Chuki, P., Rupali, P., Singh, D. R., Bajracharya, D. C., Barrow, L., Johnson, E., Prentiss, T. and Zervos, M. Feasibility Study of the World Health Organization Health Care Facility-Based Antimicrobial Stewardship Toolkit for Low- and Middle-Income Countries Antibiotics (Basel); 2020, 9 (9): Address: Division of Infectious Disease, Henry Ford Health System, Detroit, MI 48202, USA.</p> <p>World Health Organization, 1202 Geneva, Switzerland.</p> <p>Global Health Initiative, Henry Ford Health System, Detroit, MI 48202, USA.</p> <p>Ministry of Health, 207218 Lilongwe, Malawi.</p> <p>Jigme Dorji Wangchuck National Referral Hospital, 11001 Thimpu, Bhutan.</p> <p>Department of Infectious Diseases, Christian Medical College, Vellore 632004, India.</p> <p>Ministry of Health and Population, 44600 Kathmandu, Nepal.</p> <p>Group for Technical Assistance, 44600 Kathmandu, Nepal.</p> <p>Department of Health & Social Affairs, 96941 Pohnpei, Federated States of Micronesia.</p> <p>School of Medicine, Wayne State University, Detroit, MI 48202, USA.</p> <p>Antimicrobial stewardship (AMS) has emerged as a systematic approach to optimize antimicrobial use and reduce antimicrobial resistance. To support the implementation of AMS programs, the World Health Organization developed a draft toolkit for health care facility AMS programs in low- and middle-income countries. A feasibility study was conducted in Bhutan, the Federated States of Micronesia, Malawi, and Nepal to obtain local input on toolkit content and implementation of AMS programs. This descriptive qualitative study included semi-structured interviews with national- and facility-level stakeholders. Respondents identified AMS as a priority and perceived the draft toolkit as a much-needed document to further AMS program implementation. Facilitators for implementing AMS included strong national and facility leadership and clinical staff engagement. Barriers included lack of human and financial resources, inadequate regulations for prescription antibiotic sales, and insufficient AMS training. Action items for AMS implementation included improved laboratory surveillance, establishment of a stepwise approach for implementation, and mechanisms for reporting and feedback. Recommendations to improve the AMS toolkit's content included additional guidance on defining the responsibilities of the committees and how to prioritize AMS programming based on local context.</p>	INT	JUL TO DEC	Infectious Diseases	<p>PMID: 32872440</p> <p>PMC:7558985</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	The AMS toolkit was perceived to be an important asset as countries and health care facilities move forward to implement AMS programs.				
368.	<p>Malattia, C., Tolend, M., Mazzoni, M., Panwar, J., Zlotnik, M., Otobo, T., Vidarsson, L. and Doria, A. S. Current status of MR imaging of juvenile idiopathic arthritis Best Practice & Research in Clinical Rheumatology; 2020, 34 (6):</p> <p>Address: [Malattia, Clara; Mazzoni, Marta] Ist Giannina Gaslini, Clin Pediat & Reumatol, Genoa, Italy. [Malattia, Clara; Mazzoni, Marta] Univ Genoa, Dept Neurosci Rehabil Ophthalmol Genet & Maternal, Genoa, Italy. [Tolend, Mirkamal; Zlotnik, Margalit; Otobo, Tarimobo; Vidarsson, Logi; Doria, Andrea S.] Hosp Sick Children, Res Inst, Dept Diagnost Imaging, Toronto, ON, Canada. [Doria, Andrea S.] Univ Toronto, Dept Med Imaging, Toronto, ON, Canada. [Panwar, Jyoti] Christian Med Coll & Hosp, Dept Radiol, Vellore, Tamil Nadu, India. Doria, AS (corresponding author), Univ Toronto, Hosp Sick Children, Dept Diagnost Imaging, Toronto, ON, Canada. andrea.doria@sickkids.ca</p> <p>Juvenile idiopathic arthritis (JIA) is the most common chronic arthropathy in the pediatric population. Although the diagnosis is essentially clinical for many affected joints, MR imaging has become an important tool for the assessment of joints that are difficult to evaluate clinically, such as temporomandibular and sacroiliac joints, and for screening of inflammatory changes in the entire body by whole body MRI (WBMRI) assessment. The utilization of MR imaging is challenging in the pediatric population given the need for discrimination between pathological and physiological changes in the growing skeleton. Several multicentric multidisciplinary organizations have made major efforts over the past decades to standardize, quantify, and validate scoring systems to measure joint changes both cross-sectionally and longitudinally according to rigorous methodological standards. In this paper, we (1) discuss current trends for the diagnosis and management of JIA, (2) review challenges for detecting real pathological changes in growing joints, (3) summarize the current status of standardization of MRI protocols for data acquisition and the quantification of joint pathology in JIA by means of scoring systems, and (4) outline novel MR imaging techniques for the evaluation of anatomy and function of joints in JIA. Optimizing the role of MRI as a robust biomarker and outcome measure remains a priority of future research in this field. (C) 2020 Published by Elsevier Ltd.</p>	INT	JUL TO DEC	Radiology	WOS:000600663100012
369.	<p>Malik, P., Muthusamy, K., Mankad, K., Shroff, M. and Sudhakar, S. Solving the hypomyelination conundrum - Imaging perspectives Eur J Paediatr Neurol; 2020, 27 9-24</p> <p>Address: Christian Medical College, Vellore, India. Great Ormond Street Hospital, London, UK.</p>	INT	JAN TO JUN	Radiology, Neurology	<p>PMID:32418752 SCOPUS H-INDEX:61 IF: 2.496 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Hospital for Sick Children, Toronto, Ontario. Great Ormond Street Hospital, London, UK. Electronic Address: sniya.sudhakar@gmail.com.</p> <p>Hypomyelinating Leukodystrophies (HLDs) are a genetically heterogeneous, clinically overlapping group of disorders with the unifying MR imaging appearance of myelin deficit in the brain. In fact, it is the MRI phenotype that typically raises the diagnostic suspicion in this single largest group of undiagnosed leukodystrophies and guides gene testing for confirmation. This article reviews the neurobiology of myelination, focussing on the complex interplay of molecular genetic pathways and presents a practical clinico-radiological diagnostic algorithm based on the neuroimaging patterns of the common hypomyelinating disorders. The authors also address the current controversies about the definition and use of the term 'hypomyelination'.</p>				
370.	<p>Mallesappa, V., Rupa, V., Varghese, L. and Kurien, R. Avoiding repeated surgery in patients with acute invasive fungal sinusitis Eur Arch Otorhinolaryngol; 2020, 277 (6): 1667-1674</p> <p>Address: Department of ENT (Rhinology and Anterior Skull Base Unit), Christian Medical College, Vellore, 632004, India. Department of ENT (Rhinology and Anterior Skull Base Unit), Christian Medical College, Vellore, 632004, India. rupavedantam@cmcvellore.ac.in.</p> <p>PURPOSE: We aimed to ascertain whether using an aggressive initial surgical protocol would reduce the need for repeated sinus surgery in patients with acute invasive fungal sinusitis (AIFS). METHODS: Patients with AIFS prospectively underwent clinicoradiological assessment followed by bilateral functional endoscopic sinus surgery (FESS) and debridement of affected tissue. Antifungal therapy was also administered. Postoperative endoscopic debridement of crusts was performed weekly in the clinic. Outcomes were compared with a historical control group who underwent multiple surgeries. RESULTS: There were 42 male and 9 female patients aged 9-68 years (mean: 42.5 years). Forty (78.4%) patients were diabetic and 17.6% had hematological malignancies. The majority (60.8%) had stage 2 or 3 disease. Partial/total maxillectomy (29.4%), orbital exenteration (7.8%) and craniotomy (2%) were also performed at a single session in 20 patients. Intra-operative sampling of all sinuses was performed. Six patients who appeared to have unilateral disease based on clinicoradiological assessment were found to have bilateral disease. Only 2 patients required revision surgery. Follow-up ranged from 3 to 24 months. The survival rate was 68.2% overall and 73.5% for diabetics alone. The difference in outcomes with a single surgery versus multiple surgeries was not significant (p = 0.09) CONCLUSION: A surgical protocol involving bilateral FESS along with debridement of visibly affected areas and antifungal therapy avoids repeated surgery in patients with AIFS with no change in outcomes. The</p>	INT	JAN TO JUN	ENT, Rhinology and Anterior Skull Base Unit	<p>PMID:32125498 WOS:000518087800001 SCOPUS H-INDEX:67 IF: 1.750 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	absence of clinicoradiological involvement of the paranasal sinuses does not preclude the presence of invasive fungal disease in these sinuses.				
371.	<p>Mammen, J. J. and Asirvatham, E. S. The demand and supply of blood in India Lancet Haematol; 2020, 7 (2): e94</p> <p>Address: [Mammen, Joy John] Christian Med Coll & Hosp, Dept Transfus Med, Vellore 632004, Tamil Nadu, India. [Asirvatham, Edwin Sam] Christian Med Assoc India, New Delhi, India. Mammen, JJ (reprint author), Christian Med Coll & Hosp, Dept Transfus Med, Vellore 632004, Tamil Nadu, India. joymammen@cmcvellore.ac.in</p>	INT	JAN TO JUN	Transfusion Medicine and Immunohaematology, Clinical Haematology	<p>PMID:32004488 WOS:000509774700007 SCOPUS H-INDEX:44 IF: 3.430 BIOXBIO (2018/2019)</p>
372.	<p>Mammen, J., Nair, S., John, S., Singh, S., Bala, S., Abraham, A., Kavita, L., Geevar, T. and Srivastava, A. Perspectives from the External Quality Assessment Scheme for haemostasis laboratories in India Haemophilia; 2020, 26 35-35</p> <p>Address: [Mammen, Joy; Nair, Sukesh; John, Stanley; Singh, Surendar; Bala, Soumya; Abraham, Anita; Kavita, L.; Geevar, Tualsi; Srivastava, Alok] Christian Med Coll Vellore, Vellore, Tamil Nadu, India.</p>	INT	JAN TO JUN	Transfusion Medicine and Immunohaematology, Clinical Haematology	<p>WOS:000536674800052 H-INDEX:88 IF: 3.590 BIOXBIO (2018/2019)</p>
373.	<p>Mammen, S., Nair, A., Kumar, S., Zonderveni, Z., Prabhakar, A. T., Vijay Prakash, T., Aaron, S., Alexander, M., Zachariah, A. and Abraham, A. M. Clinical Features of Four West Nile Virus Cases and Its Molecular Characterization from a South Indian Tertiary Care Hospital Case Rep Infect Dis; 2020, 2020 1315041</p> <p>Address: Department of Clinical Virology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Medicine, Christian Medical College, Vellore, Tamil Nadu, India. Department of Neurology, Christian Medical College, Vellore, Tamil Nadu, India. West Nile virus (WNV) is currently a significant reemerging virus of the 21st century. It belongs to the family Flaviviridae and genus Flavivirus. Although it is primarily transmitted by the Culex spp of mosquitoes, other routes of transmission are also well defined. Of eight lineages described, Lineage 1a has been reported from many parts of South India and is known to cause neuroinvasive illness. Many tests and serological techniques have been described to diagnose WNV infection such as complement fixation, neutralization, haemagglutination inhibition, ELISA, and PCR for molecular confirmation. The latter far outweighs the limitations inherent in the other tests. WNV infection is being reported from Vellore for the first time after 1968. This paper aims to describe four cases of WNV infection causing central nervous system manifestations with its molecular characterization. West Nile virus infection was diagnosed with the available molecular techniques such as PCR and sequencing, which emphasizes the need for considering West Nile virus in the differential diagnosis of acute meningoencephalitis and the wider</p>	INT	JUL TO DEC	Clinical Virology, Medicine, Neurology	<p>PMID: 32724683 PMC:7381993</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	availability of molecular diagnostic tests.				
374.	<p>Mandal, D. A rare case of Craniopharyngioma presenting with psychosis & catatonia - A debate over the implications of the Lorazepam challenge test Indian Journal of Psychiatry; 2020, 62 S129-S129</p> <p>Address: [Mandal, Debanjan] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India.</p>	NAT	JAN TO JUN	Psychiatry	<p>WOS:000540356200431 H-INDEX:30 IF: 1.500 RG (2018/2019)</p>
375.	<p>Mani, A. M., Prabhakar, A. T., Mannam, P., Benjamin, R. N., Ahmed Shaikh, A. I., Mathew, D., Singh, P., Nair, A., Alexander, P. T., Vijayaraghavan, A., Sivadasan, A., Mani, S., Mathew, V., Aaron, S. and Alexander, M. Clinical Spectrum and Outcome of Neurosarcoidosis: A Retrospective Cohort Study from a Teaching Hospital in India Ann Indian Acad Neurol; 2020, 23 (4): 528-535 Address: Neurology Unit, Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, India. Department of Radiology, Christian Medical College, Vellore, Tamil Nadu, India. CONTEXT: Neurosarcoidosis (NS) is a chronic disease with a diverse clinical spectrum, therapeutic response, and outcome. There is scarce literature from our country regarding the same. AIMS: The aim of this study was to evaluate the clinical spectrum, therapeutic responses, and outcomes of NS in an Indian cohort. SETTINGS AND DESIGN: In a cross-sectional study, we included all patients with NS treated at a quaternary care teaching hospital in India from January 2007 to October 2019. SUBJECTS AND METHODS: Patients older than 18 years of age fulfilling the diagnostic criteria for NS from the Neurosarcoidosis Consortium Consensus Group were included in the study. The therapeutic response and the degree of disability at last follow-up were assessed. RESULTS: We identified 48 patients, among them 3 were categorized as having definite NS, 30 probable NS, and 15 possible NS. Cranial neuropathy was the most common presentation (47.9%), followed by myelopathy (25%). Systemic involvement was identified in 95.83% and mediastinal lymph nodes were the most common site. Clinical improvement was seen in 65.8% and disease stabilized in 28.9%, while 5.26% deteriorated. Fifty percent recovered without any residual disability, while 26.3% had minor and 23.7% had major residual sequelae. CONCLUSIONS: NS is a diverse illness, with a heterogeneous spectrum of clinical presentation, treatment response, and outcome. Cranial neuropathy is the most common presenting feature and has a good prognosis while myelopathy has an unfavorable prognosis. Meningeal and brain parenchymal disease is difficult to diagnose accurately unless systemic involvement is present. The diagnosis of NS should be clinically suspected in the appropriate clinical setting, the presence of systemic involvement should be investigated, and histologic confirmation should be attempted.</p>	NAT	JUL TO DEC	Neurology Unit, Neurological Sciences, Radiology	<p>PMID: 33223672 PMC:7657274</p>
376.	<p>Maradona, J. R. T., Elizabeth, G., Padankatti, S., John, J. A., Poonnoose, P. and Srivastava, A.</p>	INT	JAN TO JUN	Occupational Therapy, Physical Medicine and Rehabilitation,	<p>WOS:000536674800239 H-INDEX:88</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Establishing the reference standards for the enhanced Functional Independence Score in Haemophilia (eFISH) Haemophilia; 2020, 26 130-130</p> <p>Address: [Maradona, J. Ronald Thomvic; Elizabeth, Grace; Padankatti, Sanjeev; John, Judy Ann] Christian Med Coll & Hosp, Occupat Therapy Dept, Phys Med Rehabil, Vellore, Tamil Nadu, India. [Poonnoose, Pradeep] Christian Med Coll & Hosp, Dept Orthoped, Vellore, Tamil Nadu, India. [Srivastava, Alok] Christian Med Coll & Hosp, Dept Hematol, Vellore, Tamil Nadu, India.</p>			Orthopaedics, Clinical Haematology	IF: 3.590 BIOXBIO (2018/2019)
377.	<p>Marconi, K. P., Bharathi, B., Venis, A. M., Raj, R., Amirtham, S. M. and Subramani, S. Phenylephrine induces relaxation of longitudinal strips from small arteries of goat legs PLoS One; 2020, 15 (3): e0227316</p> <p>Address: [Marconi, Kawin Padmaja; Bharathi, Bhavithra; Venis, Alen Major; Raj, Renu; Amirtham, Soosai Manickam; Subramani, Sathya] Christian Med Coll & Hosp, Dept Physiol, Vellore, Tamil Nadu, India. [Bharathi, Bhavithra] Jawaharlal Inst Postgrad Med Educ & Res, Dept Physiol, Pondicherry, India. [Venis, Alen Major] Govt Primary Hlth Ctr, Kanyakumari, Tamil Nadu, India. [Raj, Renu] PK Das Inst Med Sci, Dept Physiol, Palakkad, Kerala, India. Subramani, S (reprint author), Christian Med Coll & Hosp, Dept Physiol, Vellore, Tamil Nadu, India. sathya@cmcvellore.ac.in</p> <p>Alpha adrenergic stimulation is known to produce vasoconstriction. We have earlier shown that, in spiral strips of small arteries Phenylephrine (PE) caused vasorelaxation under high nitric oxide (NO) environment. However, on further experimentation it was realized that the PE-induced vasorelaxant response occurred only with longitudinal strips of small arteries even under normal NO environment while circular strips showed contraction with PE even under high NO environment. Such PE-induced vasorelaxation of longitudinal strips was blocked by Phentolamine, an alpha-adrenergic receptor blocker. On delineation of specific receptor subtype, PE-induced relaxation was found to be mediated through alpha 1D receptor. However, this phenomenon is specific to small artery, as longitudinal smooth muscle of aorta showed only contractile response to adrenergic stimulation. There is no prior report of longitudinal smooth muscle in small artery up to our knowledge. The results of this study and histological examination of vessel sections suggest the presence of longitudinal smooth muscle in small artery and their relaxant response to alpha adrenergic stimulation is a novel phenomenon.</p>	INT	JAN TO JUN	Physiology	<p>PMID:32126062 PMC ID: PMC7053774 WOS:000535253100008 SCOPUS H-INDEX:300 IF: 2.776 BIOXBIO (2018/2019)</p>
378.	<p>Marcus, T. A., Jeyapaul, S., David, S. M., Jamkhandi, D. and Cherian, A. G. Outcomes of external cephalic version for antenatal women with breech presentation in a secondary hospital in Vellore, Tamil Nadu - a retrospective review</p>	INT	JUL TO DEC	Obstetrics and Gynaecology, Community Medicine, Family Medicine	<p>PMID: 33274567 PMC:7726455</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>J Turk Ger Gynecol Assoc; 2020, 21 (4): 236-242 Address: Department of Obstetrics and Gynaecology, Christian Medical College and Hospital, Vellore, India Department of Community Medicine, Christian Medical College and Hospital, Vellore, India Department of Family Medicine, Christian Medical College and Hospital, Vellore, India OBJECTIVE: Breech presentation is the most common fetal malpresentation at term, with an incidence of 3-4%. External cephalic version (ECV) is a procedure that can be offered to women with breech presentation beyond 36 weeks of gestation to convert it to cephalic presentation, reducing the risks of a vaginal breech delivery and the morbidities associated with caesarean section. MATERIAL AND METHODS: We retrospectively reviewed the records of women who underwent ECV between October 2012 and June 2020 with the objectives of determining the success rate of the procedure, the mode of delivery, the maternal and neonatal outcomes, periprocedural complications and their management. RESULTS: Among the 200 women who underwent the procedure with a 64% success rate (128 women), there were 110 vaginal deliveries (56.7%) including five vaginal breech deliveries, and 84 women (43.2%) underwent caesarean section, which included 24 women who had successful ECV but needed emergency caesarean for other indications. There was no significant difference in the neonatal APGAR scores in those who had a successful ECV and those who did not. Only three women (1.5%) experienced any significant periprocedural complication. CONCLUSION: These results suggest that ECV improves the possibility of a vaginal delivery with an overall low complication rate, reducing the neonatal risks associated with vaginal breech delivery and the maternal morbidity of a caesarean section. It may thus contribute to reducing the primary caesarean section rate, making it a useful intervention, especially in limited resource settings.</p>				
379.	<p>Mariappan, R. and Raju, K. Response to the comments raised by the readers to our published article 'An observational case-control study comparing the recovery profile in patients receiving additional dose of anticonvulsant vs. regular dose during supratentorial craniotomy.' Indian Journal of Anaesthesia; 2020, 64 (6): 546-547 Address: Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu,</p>	NAT	JAN TO JUN	Anesthesia, Neurological Sciences	<p>PMID: 32792731 PMC:7398027 SCOPUS H-INDEX:26 IF: 0.170 RG (2018/2019)</p>
380.	<p>Mascarenhas, M., Kalampokas, T., Sunkara, S. K. and Kamath, M. S. Concordance between systematic reviews of randomized controlled trials in assisted reproduction: an overview Hum Reprod Open; 2020, 2020 (4): hoaa058 Address: Glasgow Centre for Reproductive Medicine, Glasgow, UK. 2nd Department of Obstetrics and Gynecology-"Rea Maternity Hospital",</p>	INT	JUL TO DEC	Reproductive Medicine	<p>PMID: 33381658 PMC:7753002</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>University of Athens, Athens, Greece. Division of Women's Health, Faculty of Life Sciences and Medicine, King's College London, London, UK. Department of Reproductive Medicine, Christian Medical College, Vellore, India. STUDY QUESTION: Are systematic reviews published within a 3-year period on interventions in ART concordant in their conclusions? SUMMARY ANSWER: The majority of the systematic reviews published within a 3-year period in the field of assisted reproduction on the same topic had discordant conclusions. WHAT IS KNOWN ALREADY: Systematic reviews and meta-analyses have now replaced individual randomized controlled trials (RCTs) at the top of the evidence pyramid. There has been a proliferation of systematic reviews and meta-analyses, many of which suffer from methodological issues and provide varying conclusions. STUDY DESIGN SIZE DURATION: We assessed nine interventions in women undergoing ART with at least three systematic reviews each, published from January 2015 to December 2017. PARTICIPANTS/MATERIALS SETTING METHODS: The systematic reviews which included RCTs were considered eligible for inclusion. The primary outcome was extent of concordance between systematic reviews on the same topic. Secondary outcomes included assessment of quality of systematic reviews, differences in included studies in meta-analyses covering the same search period, selective reporting and reporting the quality of evidence. MAIN RESULTS AND THE ROLE OF CHANCE: Concordant results and conclusions were found in only one topic, with reviews in the remaining eight topics displaying partial discordance. The AMSTAR grading for the majority of the non-Cochrane reviews was critically low whilst it was categorized as high for all of the Cochrane reviews. For three of the nine topics, none of the included systematic reviews assessed the quality of evidence. We were unable to assess selective reporting as most of the reviews did not have a pre-specified published protocol. LIMITATIONS REASONS FOR CAUTION: We were limited by the high proportion of reviews lacking a pre-specified protocol, which made it impossible to assess for selective reporting. Furthermore, many reviews did not specify primary and secondary outcomes which made it difficult to assess reporting bias. All the authors of this review were Cochrane review authors which may introduce some assessment bias. The categorization of the review's conclusions as beneficial, harmful or neutral was subjective, depending on the tone and wording of the conclusion section of the review. WIDER IMPLICATIONS OF THE FINDINGS: The majority of the systematic reviews published within a 3-year period on the same topic in the field of assisted reproduction revealed discordant conclusions and suffered from serious methodological issues, hindering the process of informed healthcare decision-making. STUDY FUNDING/COMPETING INTERESTS: All the authors are Cochrane authors. M.S.K. is an editorial board member of Cochrane Gynaecology and Fertility group. No grant from funding agencies in the public, commercial or not-for-profit sectors was obtained.</p>				
381.	Mascarenhas, M., Mehlawat, H., Kirubakaran, R., Bhandari, H. and Choudhary, M.	INT	JUL TO DEC	Biostatistics	PMID: 33313698

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Live birth and perinatal outcomes using cryopreserved oocytes: an analysis of the Human Fertilisation and Embryology Authority database from 2000 to 2016 using three clinical models Hum Reprod; 2020, Address: Glasgow Centre for Reproductive Medicine, Glasgow G51 4FD, UK. Department of Population Health Sciences, University College London, London WC1E 6BT, UK. Department of Biostatistics, Christian Medical College, Vellore 632004, India. Department of Reproductive Medicine, Leeds Fertility, Leeds Teaching Hospitals NHS Trust, Leeds LS14 6UH, UK. Department of Reproductive Medicine, Newcastle Fertility Centre at Life, Newcastle upon Tyne Hospitals NHS Foundation Trust, Newcastle upon Tyne NE1 4EP, UK.</p> <p>STUDY QUESTION: Are live birth (LB) and perinatal outcomes affected by the use of frozen own versus frozen donor oocytes? SUMMARY ANSWER: Treatment cycles using frozen own oocytes have a lower LB rate but a lower risk of low birth weight (LBW) as compared with frozen donor oocytes. WHAT IS KNOWN ALREADY: A rising trend of oocyte cryopreservation has been noted internationally in the creation of donor oocyte banks and in freezing own oocytes for later use in settings of fertility preservation and social egg freezing. Published literature on birth outcomes with frozen oocytes has primarily utilised data from donor oocyte banks due to the relative paucity of outcome data from cycles using frozen own oocytes. STUDY DESIGN, SIZE, DURATION: This was a retrospective cohort study utilising the anonymised database of the Human Fertilisation and Embryology Authority, which is the statutory regulator of fertility treatment in the UK. We analysed 988 015 IVF cycles from the Human Fertilisation and Embryology Authority (HFEA) register from 2000 to 2016. Perinatal outcomes were assessed from singleton births only. PARTICIPANTS/MATERIALS, SETTING, METHODS: Three clinical models were used to assess LB and perinatal outcomes: Model 1 compared frozen own oocytes (n = 632) with frozen donor oocytes (n = 922); Model 2 compared frozen donor oocytes (n = 922) with fresh donor oocytes (n = 24 706); Model 3 compared first cycle of fresh embryo transfer from frozen donor oocytes (n = 917) with first cycle of frozen embryo transfer created with own oocytes and no prior fresh transfer (n = 326). Preterm birth (PTB) was defined as LB before 37 weeks and LBW as birth weight <2500 g. Adjustment was performed for confounding variables such as maternal age, number of embryos transferred and decade of treatment. MAIN RESULTS AND THE ROLE OF CHANCE: The LB rate (18.0% versus 30.7%; adjusted odds ratio (aOR) 0.61, 95% CI 0.43-0.85) and the incidence of LBW (5.3% versus 14.0%; aOR 0.29, 95% CI 0.13-0.90) was significantly lower with frozen own oocytes as compared with frozen donor oocytes with no significant difference in PTB (9.5% versus 15.7%; aOR 0.56, 95% CI 0.26-1.21). A lower LB rate was noted in frozen donor oocyte cycles (30.7% versus 34.7%; aOR 0.69, 95% CI 0.59-0.80) when compared with fresh donor oocyte cycles. First cycle frozen donor oocytes did not show any significant</p>				

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	<p>difference in LB rate (30.1% versus 19.3%; aOR 1.26, 95% CI 0.86-1.83) or PTB, but a higher incidence of LBW (17.7% versus 5.4%; aOR 3.77, 95% CI 1.51-9.43) as compared with first cycle frozen embryos using own oocytes. LIMITATIONS, REASONS FOR CAUTION: The indication for oocyte freezing, method of freezing used (whether slow-freezing or vitrification) and age at which eggs were frozen were unavailable. We report a subgroup analysis of women using their own frozen oocytes prior to 37 years. Cumulative LB rate could not be assessed due to the anonymous nature of the dataset. WIDER IMPLICATIONS OF THE FINDINGS: Women planning to freeze their own eggs for fertility preservation or social egg freezing need to be counselled that the results from frozen donor egg banks may not completely apply to them. However, they can be reassured that oocyte cryopreservation does not appear to have a deleterious effect on perinatal outcomes. STUDY FUNDING/COMPETING INTEREST(S): No specific funding was sought for the study. The authors have no relevant conflicts of interest. TRIAL REGISTRATION NUMBER: N/A.</p>				
382.	<p>Mathew, A. J. and Chandran, V. Depression in Psoriatic Arthritis: Dimensional Aspects and Link with Systemic Inflammation Rheumatology and Therapy; 14</p> <p>Address: [Mathew, Ashish J.; Chandran, Vinod] Univ Hlth Network, Psoriatic Dis Program, Ctr Prognosis Studies Rheumat Dis, Krembil Res Inst, Toronto, ON, Canada. [Mathew, Ashish J.; Chandran, Vinod] Univ Toronto, Div Rheumatol, Dept Med, Toronto, ON, Canada. [Mathew, Ashish J.; Chandran, Vinod] Univ Toronto, Dept Lab Med & Pathobiol, Toronto, ON, Canada. [Mathew, Ashish J.; Chandran, Vinod] Univ Toronto, Inst Med Sci, Toronto, ON, Canada. [Mathew, Ashish J.; Chandran, Vinod] Mem Univ, Dept Med, St John, NF, Canada. [Mathew, Ashish J.] Christian Med Coll & Hosp, Dept Clin Immunol & Rheumatol, Vellore, Tamil Nadu, India.</p> <p>Chandran, V (reprint author), Univ Hlth Network, Psoriatic Dis Program, Ctr Prognosis Studies Rheumat Dis, Krembil Res Inst, Toronto, ON, Canada. vinod.chandran@uhnresearch.ca</p> <p>Studying comorbidities in patients with psoriatic arthritis (PsA) provides a better understanding of the extended burden of the disease. Depression and anxiety are well recognized but understudied comorbidities in patients with PsA. The prevalence of depression is significantly higher in this patient population than in the general population, with far reaching consequences in terms of long-term quality of life. Over the past few years there has been an increasing interest in the link between inflammation and depression, with several novel studies being conducted. Recent evidence suggests a significant improvement of depression in PsA patients treated with biologic disease-modifying anti-rheumatic drugs (bDMARDs) as compared to conventional DMARDs. Depression in PsA is</p>	INT	JAN TO JUN	Clinical Immunology and Rheumatology	<p>WOS:000528070500001 H-INDEX:NA IF: 3.615 Publisher Site (2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>multidimensional, with recognized phenotypes, including cognitive disorder, alexithymia and anhedonia. The paucity of standardized, validated tools to screen these dimensional phenotypes remains an unmet need. Prevalence studies on depression in patients with PsA, mostly based on patient-reported outcomes, are only able to highlight the tip of the iceberg. A comprehensive, multi-disciplinary approach addressing the subdomains of depression is imperative for a better understanding of depression in PsA patients, as well as to find a way forward for improving their quality of life. In this scoping review, we explore existing evidence on the burden of depression in PsA patients, the link between inflammation and depression in these patients and the screening tools used to evaluate the subdomains of depression. Plain Language Summary Psoriatic arthritis (PsA) is a chronic, deforming arthritis associated with the skin condition psoriasis. A large number of patients with PsA are known to have another co-existing chronic disease, which adds to their overall disease burden and affects their quality of life. Depression is a common illness known to co-exist in about 20% of patients with PsA. Inflammation is a common factor between psoriatic arthritis and depressive disorders and is thought to play an important role in depression occurring in these patients. Recent research in the field has revealed that different dimensions of depression, such as the inability to feel pleasure, loss of intellectual functions and difficulty identifying and expressing emotions, may contribute to the overall disease. It is important to screen for these dimensions while assessing PsA patients with depression. Most of the studies conducted to date have based the diagnosis of depression on self-reported questionnaires. In this article we describe the relation between inflammation and different dimensions of depression in patients with PsA and set out a feasible screening method for depression. A good understanding of depression in patients with PsA will be useful in designing treatment strategies.</p>				
383.	<p>Mathew, A. J., Krabbe, S., Eshed, I., Lambert, R. G. W., Laredo, J. D., Maksymowych, W. P., Gandjbakhch, F., Emad, Y., Stoenoiu, M. S., Foltz, V., Bird, P., Carron, P., Paschke, J., Conaghan, P. G., Pedersen, S. J., Glinatsi, D. and Østergaard, M. Atlas of the OMERACT Heel Enthesitis MRI Scoring System (HEMRIS) RMD Open; 2020, 6 (1): Address: Copenhagen Center for Arthritis Research, Center for Rheumatology and Spine Diseases, Copenhagen University Hospital, Glostrup, Denmark Department of Clinical Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark Clinical Immunology and Rheumatology, Christian Medical College, Vellore, India Department of Diagnostic Imaging, Sheba Medical Center, Affiliated to the Sackler School of Medicine, Tel Aviv University, Tel Aviv, Israel Department of Radiology and Diagnostic Imaging, University of Alberta, Edmonton, Alberta, Canada Medical Imaging Consultants, Edmonton, Alberta, Canada Service de Radiologie, Hôpital Lariboisière, APHP and Université Paris-Diderot,</p>	INT	JAN TO JUN	Clinical Immunology and Rheumatology	<p>SCOPUS H-INDEX:28 IF: 2.200 RG (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Paris, France CaRE (Canadian Research Education) Arthritis, Edmonton, Alberta, Canada Department of Medicine, University of Alberta, Edmonton, Alberta, Canada Department of Rheumatology, CHU Pitié-Salpêtrière, Assistance Publique - Hôpitaux de Paris, Paris, France Paris 6 University, GRC-UPMC 08, Pierre Louis Institute of Epidemiology and Public Health, Paris, France Rheumatology, Faculty of Medicine, Cairo University, Giza, Egypt Rheumatology, Cliniques Universitaires Saint-Luc, Cliniques Universitaires Saint-Luc, Brussels, Belgium Institut de Recherche Experimentale et Clinique, Universite Catholique de Louvain la Faculte de Medecine, Brussels, Belgium Division of Medicine, University of New South Wales, Sydney, New South Wales, Australia Rheumatology, Ghent University Hospital, Ghent, Belgium Leeds Institute of Rheumatic and Musculoskeletal Medicine, University of Leeds, Leeds, United Kingdom Leeds Teaching Hospitals NHS Trust, NIHR Leeds Biomedical Research Centre, Leeds, United Kingdom Rheumatology, Skaraborg Hospital Skövde, Skovde, Sweden</p> <p>Objective Assessment of enthesitis, a key feature in spondyloarthritis (SpA) and psoriatic arthritis (PsA), using objective and sensitive methods is pivotal in clinical trials. MRI allows detection of both soft tissue and intra-osseous changes of enthesitis. This article presents an atlas for the Outcome Measures in Rheumatology (OMERACT) Heel Enthesitis Magnetic Resonance ImagingMRI Scoring System (HEMRIS). Methods Following a preliminary selection of potential examples of each grade, as per HEMRIS definitions, the images along with detailed definitions and reader rules were discussed at web-based, interactive meetings between the members of the OMERACT MRI in Arthritis Working Group. Results Reference images of each grade of the MRI features to be assessed using HEMRIS, along with reader rules and recommended MRI sequences are depicted. Conclusion The presented reference images can be used to guide scoring Achilles tendon and plantar fascia (plantar aponeurosis) enthesitis according to the OMERACT HEMRIS in clinical trials and cohorts in which MRI enthesitis is used as an outcome. © Author(s) (or their employer(s)) 2020. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.</p>				
384.	<p>Mathew, A., Doorenbos, A. Z. and Vincent, C. Symptom Management Theory: Analysis, Evaluation, and Implications for Caring for Adults With Cancer ANS Adv Nurs Sci; 2020, Publish Ahead of Print</p> <p>Address: College of Nursing, University of Illinois, Chicago (Ms Mathew and Drs</p>	INT	JUL TO DEC	College of Nursing	PMID: 33394585

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Doorenbos and Vincent); College of Nursing, Christian Medical College, Vellore, Tamil Nadu, India (Ms Mathew); and University of Illinois Cancer Center, Chicago (Dr Doorenbos).</p> <p>A detailed analysis of Symptom Management Theory (SMT) along with its extent of use and implications for adults with cancer as demonstrated in 20 oncology research studies is reported. SMT provides useful guidance for adult oncology research and nursing practice. Theory dimension most researched in cancer was symptom experience. Although theory assertions were demonstrated in 80% of the studies, it was used to an adequate extent only in 35% of them. Comparisons between cancer-related clinical outcomes with and without use of SMT, certain theory modifications, and future SMT-based studies involving longitudinal designs in this population are warranted.</p>				
385.	<p>Mathew, A., Doorenbos, A. Z., Jang, M. K. and Hershberger, P. E.</p> <p>Acceptance and commitment therapy in adult cancer survivors: a systematic review and conceptual model</p> <p>J Cancer Surviv; 2020, Address: Department of Biobehavioral Nursing Science, College of Nursing, University of Illinois, 845 S. Damen Ave. Room 1024, Chicago, IL, 60612, USA. asolom8@uic.edu.</p> <p>College of Nursing, Christian Medical College, Vellore, India. asolom8@uic.edu. Department of Biobehavioral Nursing Science, College of Nursing, University of Illinois, 845 S. Damen Ave. Room 1024, Chicago, IL, 60612, USA.</p> <p>University of Illinois Cancer Center, Chicago, IL, USA.</p> <p>PURPOSE: People with cancer experience significant physical and psychological symptoms, during as well as after primary treatment. Acceptance and Commitment Therapy (ACT), a psychological intervention, reduces both types of symptoms among individuals with chronic pain and emotional distress. Due to the unique challenges of cancer survivorship, this systematic review critically evaluates and synthesizes the literature on the context, mechanisms, and effect of ACT among adult cancer survivors. METHODS: Articles were retrieved from the CINAHL, MEDLINE via Ovid, Web of Science, PsycInfo, Scopus, Embase, Google Scholar, and Cochrane databases. Selected grey literature portals, clinical trial registries, and conference proceedings were also searched. The NIH tools were used to assess study quality and the revised Cochrane Risk-of-Bias tool to assess risk of bias RESULTS: Thirteen articles, reporting on 537 cancer survivors with various cancer types, were included. ACT significantly reduced anxiety, depression, and fear of cancer recurrence and improved psychological flexibility and quality of life. Outcomes such as pain and insomnia were understudied. Lack of participant blinding and non-random assignment were the most common methodological issues. A conceptual model is proposed that describes the possible influencing factors of an ACT-based intervention in cancer survivors. CONCLUSION: Review findings suggest that ACT is an effective intervention to improve some of the common concerns among cancer survivors. While all the studies in the review were recent (published 2015-2019), they examined only a limited number of outcomes.</p>	INT	JUL TO DEC	College of Nursing	PMID: 32949353

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Hence, more methodologically rigorous studies which examine the effect of ACT on other troubling symptoms among cancer survivors are warranted. IMPLICATIONS FOR CANCER SURVIVORS: Incorporating ACT into comprehensive post-treatment survivorship care can enhance psychological flexibility and reduce anxiety, depression, and fear.				
386.	<p>Mathew, A., Doorenbos, A. Z., Li, H., Jang, M. K., Park, C. G. and Bronas, U. G. Allostatic Load in Cancer: A Systematic Review and Mini Meta-Analysis Biol Res Nurs; 2020, 1099800420969898</p> <p>Address: College of Nursing, University of Illinois, Chicago, IL, USA. College of Nursing, Christian Medical College, Vellore, India. University of Illinois Cancer Center, Chicago, IL, USA. Department of Population Health Nursing Science, Office of Research Facilitation, Chicago, IL, USA. Laboratory of Vascular and Cognitive Health, Chicago, IL, USA.</p> <p>BACKGROUND: Individuals with cancer experience stress throughout the cancer trajectory. Allostatic load (AL), a cumulative multi-system measure, may have a greater value in stress assessment and the associated biological burden than individual biomarkers. A better understanding of the use of AL and its operationalization in cancer could aid in early detection and prevention or alleviation of AL in this population. PURPOSE: To consolidate findings on the operationalization, antecedents, and outcomes of AL in cancer. METHODS: Seven databases (CINAHL, Ovid MEDLINE, Web of Science, APA PsycInfo, Scopus, Embase, and Cochrane CENTRAL) were searched for articles published through April 2020. The NIH tools were used to assess study quality. RESULTS: Twelve studies met inclusion criteria for this review. Although variability existed in the estimation of AL, biomarkers of cardiovascular, metabolic, and immune systems were mostly used. Associations of AL with cancer-specific variables were examined mostly utilizing population-databases. Significant associations of AL with variables such as cancer-related stress, positive cancer history, post traumatic growth, resilience, tumor pathology, and cancer-specific mortality were found. Mini meta-analysis found that a one-unit increase in AL was associated with a 9% increased risk of cancer-specific mortality. CONCLUSION: This review reveals heterogeneity in operationalization of AL in cancer research and lack of clarity regarding causal direction between AL and cancer. Nevertheless, AL holds a significant promise in cancer research and practice. AL could be included as a screening tool for high-risk individuals or a health outcome in cancer. Optimal standardized approaches to measure AL would improve its clinical utility.</p>	INT	JUL TO DEC	College of Nursing	<p>PMID: 33138637 WOS:000598422900001</p>
387.	<p>Mathew, L., Durga, P. and John, R. Factors Contributing to Delay in Chemotherapy Administration in Children With Cancer Pediatric Blood & Cancer; 2020, 67 S255-S255</p> <p>Address: [Mathew, L.; Durga, P.; John, R.] Christian Med Coll & Hosp, Pediat Hematol Oncol, Vellore, Tamil Nadu, India</p>	INT	JUL TO DEC	Pediatric Hematology Oncology	WOS:000581769200560

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
388.	<p>Mathew, L., George, R., Sudhakar, S., Keshava, S. N. and Fouzia, N. A. Clinical Profile of Overgrowth Syndromes Consistent with PROS (PIK3CA-Related Overgrowth Syndromes)-A Case Series Indian Dermatol Online J; 2020, 11 (5): 738-746 Address: Department of Dermatology, Venereology and Leprosy, Christian Medical College, Vellore, Tamil Nadu, India. Department of Radiodiagnosis, Christian Medical College, Vellore, Tamil Nadu, India. Department of Haematology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>CONTEXT: PIK3CA-related overgrowth syndrome (PROS) is characterized by focal and disproportionate growth of acral body structures in a mosaic pattern with varied phenotypes. Clinical diagnostic criteria are available and testing of the mutation is recommended for diagnosis. Cutaneous features described in these conditions include epidermal nevi and vascular malformations which form part of the diagnostic criteria. AIMS: To detail the clinical profile of patients with presumptive PROS. SETTINGS AND DESIGN: We conducted a retrospective study of 15 patients with focal overgrowth of the extremities or macrocephaly who presented to the department of dermatology at a tertiary care hospital in South India. SUBJECTS AND METHODS: Data were collected through electronic medical records from July 2012 to April 2018 over 70 months. The criterion proposed by Kepler-Noreuil et al. was used for classifying them as presumptive PROS in the absence of genetic studies. STATISTICAL ANALYSIS USED: Descriptive analysis. RESULTS: There were nine males and six females; mean age of 12.10 years (range: 8 months to 73 years) with clinical features consistent with PROS. There was a higher frequency of vascular malformations (9/15, 60%) and of epidermal nevi (7/15, 46.6%) than that reported in the literature. Unusual features included focal acrochordons, blaschkoid hypopigmentation and linear papillomatous growths in the oral mucosa. CONCLUSIONS: This study provides data on the clinical features of patients with PROS from the Indian subcontinent. In resource-poor settings, clinical criteria may be adequate for diagnosis due to restricted accessibility of technically challenging diagnostic tests.</p>	NAT	JUL TO DEC	Dermatology, Venereology and Leprosy, Radiodiagnosis, Haematology	<p>PMID: 33235839 PMC:7678549</p>
389.	<p>Mathew, L., John, R. and Shajan, S. Impact of Late Effects Among Survivors of Medulloblastoma Pediatric Blood & Cancer; 2020, 67 S324-S324 Address: [Mathew, L.; John, R.; Shajan, S.] Christian Med Coll & Hosp, Pediat Hematol Oncol, Vellore, Tamil Nadu, India.</p>	INT	JUL TO DEC	Pediatric Hematology Oncology	WOS:000581769201069
390.	<p>Mathew, L., John, R., Totadri, S., Boddu, D., Joseph, L. and Hema, N. S. CORRELATION OF ABSOLUTE BLAST COUNT ON DAY EIGHT OF TREATMENT WITH MINIMAL RESIDUAL DISEASE IN B-ALL Pediatric Blood & Cancer; 2020, 67 S163-S163 Address: [Mathew, Leni; John, Rikki; Totadri, Sidharth; Boddu, Deepthi; Joseph,</p>	INT	JAN TO JUN	Pediatric Hematology Oncology	<p>WOS:000530720700311 H-INDEX:100 IF: 2.486 BIOXBIO (2018/2019)</p>

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	Leenu; Hema, N. S.] Christian Med Coll & Hosp , Pediat Hematol Oncol, Vellore , Tamil Nadu, India.				
391.	<p>Mathew, P., Jaguga, C., Mpundu, M. and Chandy, S. J. Building knowledge and evidence base on antimicrobial resistance in Africa, through 'One Health' based surveillance Clinical Epidemiology and Global Health; 2020, 8 (1): 313-317</p> <p>Address: ReAct Asia Pacific, Pushpagiri Institute of Medical Sciences & Research Centre, Thiruvalla, Kerala, India ReAct Africa, Ecumenical Pharmaceutical Network, Bayswater Apartments, Ngong Road, Nairobi, Kenya ReAct Asia Pacific, Christian Medical College, Vellore, Tamil Nadu, India</p> <p>Antimicrobial Resistance is threatening to upset much of the progress that developing countries have made in the healthcare domain over the last few decades. Though there are issues with the projected morbidity and mortality figures, there is a general agreement that the data collection processes need to be strengthened, especially in the context of developing countries of Asia, Africa and Latin America. The high burden of disease associated with communicable diseases in Africa, increases the overall antibiotic use and weakens the healthcare system of the continent. Even though the scale of antibiotic use may be lower than in some other regional contexts, the high burden of infectious disease makes antimicrobial resistance a priority in the continental context. In human health sector, antibiotic resistance is becoming a problem in community acquired infections as well as healthcare associated infections. This situation is fuelled by the rampant misuse of antibiotics across the African countries; and the surveillance efforts have been quite weak in this regard. Antibiotic use is increasing in food animal production too, as the continent is moving towards various intensification methods to improve productivity. Therefore the surveillance of antimicrobial resistance patterns in animal health and food animal production, has a lot of significance in understanding the potential threats to human health and food security. But for any surveillance system to be effective, especially in the context of AMR, it needs to be truly 'One Health' in its approach. The division between animal health and human health is not scientific, but cultural in its character. This has to be broken down to create a proper 'One Health' surveillance system with data integration possible at different levels. © 2019 INDIACLEN</p>	INT	JAN TO JUN	Clinical Pharmacology	<p>SCOPUS H-INDEX:8 IF: 0.520 RESURCHIFY (2018/2019)</p>
392.	<p>Mathew, R. R., Raju, K., Nair, B. R. and Mariappan, R. An observational case-control study comparing the recovery profile in patients receiving additional dose of anticonvulsant vs. regular dose during supratentorial craniotomy Indian J Anaesth; 2020, 64 (3): 222-229</p> <p>Address: Department of Anaesthesia, Christian Medical College, Vellore, Tamil</p>	NAT	JAN TO JUN	Anaesthesia, Neurological Sciences, Neuroanaesthesia	<p>PMID:32346170 PMC ID: PMC7179789 SCOPUS H-INDEX:26 IF: 0.170 RG (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Nadu, India. Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, India. Department of Neuroanaesthesia, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND AND AIMS: Anticonvulsants are used routinely for seizure prophylaxis in patients with supratentorial tumour who present with/without seizures. Excessive use of prophylactic anticonvulsant may delay the recovery from anaesthesia. We have studied the recovery profiles of patients who received an additional dose of anticonvulsant in comparison with those who received only the regular dose. METHODS: In this prospective observational study, patients were anaesthetised using standard anaesthesia protocol. An additional dose of anticonvulsant was administered in one group, while the other group received only the regular dose. Time taken for extubation, eye opening, obeying commands and orientation were compared between the two groups. Haemodynamics, depth of anaesthesia, the plasma anticonvulsant levels and the incidence of seizures were compared between the two groups. RESULTS: A total of 36 patients were studied, of which 19 received regular dose and 17 received an additional dose. There was no significant difference in recovery time between the two groups. Subgroup analysis was performed for phenytoin and sodium valproate. There was a clinically significant delay in recovery in patients who received an additional phenytoin compared to those who received regular dose (time to obey commands >15 min and orientation time >1 hour) but, it was not statistically significant. Administration of an additional dose of valproate did not prolong the recovery time. CONCLUSION: An additional dose of sodium valproate did not cause a delay in recovery both, clinically and statistically. However, the administration of an additional dose of phenytoin caused a clinically significant delay in recovery but was not statistically significant.</p>				
393.	<p>Mathew, S. S., Kurien, R. and Varghese, L. Nontraumatic Aneurysm-An Unusual Cause of Epistaxis Ear Nose Throat J; 2020, 145561320956483 Address: Department of Otorhinolaryngology, 30025 Christian Medical College, Vellore, India.</p>	INT	JUL TO DEC	Otorhinolaryngology	PMID: 32921176
394.	<p>Mathur, P., Malpiedi, P., Walia, K., Malhotra, R., Srikantiah, P., Katoch, O., Katyal, S., Khurana, S., Misra, M. C., Gupta, S., Kumar, S., Sagar, S., Vig, N., Garg, P., Kapil, A., Sahu, M., Chakrabarti, A., Ray, P., Biswal, M., Taneja, N., Rupali, P., Chacko, V. B., Michael, J. S., Balaji, V., Rodrigues, C., Nag, V. L., Tak, V., Venkatesh, V., Mukhopadhyay, C., Vandana, K. E., Varma, M., Deotale, V., Attal, R., Padmaja, K., Wattal, C., Goel, N., Bhattacharya, S., Karuna, T., Saigal, S., Behera, B., Singh, S., Thirunarayan, M. A., Nath, R., Ray, R., Baveja, S., D'souza, D., Chandu, M., Mukherjee, S., Roy, M., Goel, G., Tripathy, S., Misra, S., Dey, A., Mishra, T., Raj, H., Fomda, B., Bashir, G., Nazir, S., Devi, S., Devi, K. R., Singh, L. C., Das, P., Bhargava, A., Gaikwad,</p>	INT	JUL TO DEC	Infectious Diseases, Critical Care Unit, Clinical Microbiology	WOS:000603476300573

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>U., Khandelwal, N., Vaghela, G., Sukharamwala, T., Verma, P., Lamba, M., Jain, S., Bhattacharyya, P., Phukan, A., Lyngdoh, C., Sharma, R., Gaind, R., Saksena, R., Kapoor, L., Gupta, N., Sharma, A., Vanderende, D., Velayudhan, A., Siromany, V., Laserson, K. and Guleria, R.</p> <p>Surveillance and Control Efforts for Carbapenemase-Producing Gram-Negatives at a High Burden Vietnam University Hospital</p> <p>Infection Control and Hospital Epidemiology; 2020, 41 S398-S399</p> <p>Address: [Mathur, Purva; Malhotra, Rajesh; Katoch, Omika; Katyal, Sonal; Khurana, Surbhi; Kumar, Subodh; Sagar, Sushma; Vig, Naveet; Garg, Pramod; Kapil, Arti; Sahu, Manoj; Guleria, Randeep] All India Inst Med Sci, New Delhi, India. [Malpiedi, Paul] US Centers Dis Control & Prevent, Atlanta, GA USA. [Walia, Kamini] Indian Council Med Res, New Delhi, India. [Srikantiah, Padmini] CDC, BMGF, Atlanta, GA 30333 USA. [Misra, Mahesh Chandra] MGMC Jaipur, Jaipur, Rajasthan, India. [Gupta, Sunil] Safdarjang Hosp, New Delhi, India. [Chakrabarti, Arunaloke; Ray, Pallab; Biswal, Manisha; Taneja, Neelam] PGI Chandigarh, Chandigarh, India. [Rupali, Priscilla] Christian Med Coll Vellore Binila Chacko, CMC Vellore, Vellore, Tamil Nadu, India. [Michael, Joy Sarojini; Balaji, Veeraraghavan] CMC Vellore, Vellore, Tamil Nadu, India. [Rodrigues, Camilla] Hinduja Hosp, Mumbai, Maharashtra, India. [Nag, Vijaya Lakshmi] AIIMS Jodhpur, Jodhpur, Rajasthan, India. [Tak, Vibhor] AIIMS, Jodhpur, Rajasthan, India. [Venkatesh, Vimala] KGMU Lucknow, Lucknow, Uttar Pradesh, India. [Mukhopadhyay, Chiranjay; Vandana, K. E.] KMC Manipal, Manipal, India. [Varma, Muralidhar] Manipal Univ, Kasturba Med Coll, Manipal, India. [Deotale, Vijayshri; Attal, Ruchita] MGIMS Sevagram, Sevagram, India. [Padmaja, Kanne] NIMS Hyderabad, Hyderabad, Telangana, India. [Wattal, Chand; Goel, Neeraj; Sharma, Aditya] Sir Ganga Ram Hosp, Delhi, India. [Bhattacharya, Sanjay; Chandy, Mammen; Mukherjee, Sudipta; Roy, Manas; Goel, Gaurav] Tata Med Ctr, Kolkata, India. [Karuna, Tadepalli; Saigal, Saurabh] AIIMS Bhopal, Bhopal, India. [Behera, Bijayini] AIIMS Bhubaneswar, Bhubaneswar, India. [Singh, Sanjeev] Amrita Inst Med Sci, Kochi, Kerala, India. [Thirunarayan, M. A.] Apollo Hosp, Chennai, Tamil Nadu, India. [Nath, Reema] Assam Med Coll, Dibrugarh, Assam, India. [Ray, Raja] IPGIMER Kolkata, Kolkata, India. [Baveja, Sujata; D'Souza, Desma] LTMMC Mumbai, Mumbai, Maharashtra, India. [Tripathy, Swagata; Misra, Satyaheet; Dey, Anupam; Mishra, Tushar; Raj, Hirak; Fomda, Bashir] AIIMS Bhubaneswar, Bhubaneswar, India. [Fomda, Bashir; Bashir, Gulnaz; Nazir, Shaista] SKIMS Kashmir, Srinagar, India. [Devi, Sulochana; Devi, Khurajam Ranjana; Singh, Langpoklakpam Chaoba] RIMS Imphal, Imphal, Manipur, India. [Das, Padma; Bhargava, Anudita; Gaikwad, Ujjwala] All India Inst Med Sci, Raipur, Madhya Pradesh, India. [Khandelwal, Neeta; Vaghela, Geeta; Sukharamwala, Tanvi] GMC Surat, Surat, India. [Verma, Prachi; Lamba, Mamta; Jain, Shristi] MGMC Jaipur, Jaipur, Rajasthan, India. [Bhattacharyya, Prithwis; Phukan, Anil; Lyngdoh, Clarissa] NEIGRIHMS Shillong, Shillong, Meghalaya, India. [Sharma, Rajeev; Gupta, Neil; Sharma, Aditya; VanderEnde, Daniel; Velayudhan, Anoop] US Ctr Dis Control & Prevent, Atlanta, GA USA. [Gaind, Rajni] Safdarjang Hosp, Delhi, India. [Gaind, Rajni] VMMC, Delhi, India. [Saksena, Rushika] Vardhman Mahavir Med Coll & Safdurjung</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Hosp, New Delhi, India. [Kapoor, Lata] Natl Ctr Dis Control, Atlanta, GA USA. [Siromany, Valan] Ctr Dis Control & Prevent, Atlanta, GA USA. [Laserson, Kayla] CDC, BMGF, Atlanta, GA 30333 USA.				
395.	<p>Matthai, S. M., Alexander, S., Jacob, S., Duhli, N., David, V. G. and Varughese, S. Crystals, crystals everywhere but not a clue till late... Light chain crystalline proximal tubulopathy with concomitant myeloma cast nephropathy Indian journal of pathology & microbiology; 2020, 63 (3): 463-466</p> <p>Address: Department of Pathology, Central Electron Microscopy Facility, Wellcome Trust Research Laboratory, Christian Medical College, Vellore, Tamil Nadu, India. Department of Nephrology, Christian Medical College, Vellore, Tamil Nadu, India. Department of General Pathology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>The renal diseases commonly associated with myeloma include primary amyloidosis, cast nephropathy, and light chain deposition disease. Less frequent forms of renal involvement encountered in the course of myeloma are crystalline and non-crystalline proximal tubulopathies, neoplastic plasma cell infiltration, and immunoglobulin crystallization in interstitial histiocytes and glomerular cells including podocytes. Light chain proximal tubulopathy (LCPT) caused by aggregation of non-crystalline and rarely crystalline deposits of monoclonal light chains in the cytoplasm of proximal tubular epithelial cells, accounts for less than 5% of monoclonal gammopathy-associated kidney diseases. We report the case of a 48-year-old Indian woman with multiple myeloma, who presented with acute kidney injury and nephrotic syndrome, in whom the renal biopsy revealed widespread crystalline inclusions in extraglomerular and glomerular compartments. We present illustrative light microscopic (LM) and diagnostic electron microscopic (EM) findings of this case which enabled a diagnosis of crystalline LCPT, crystal storing histiocytosis, and crystalline podocytopathy occurring synchronously with myeloma cast nephropathy. While documenting this unique juxtapositioning of multicompartmental paraproteinemic renal injury in multiple myeloma, diagnosed after EM analysis of the patient's renal biopsy, we discuss the pathogenetic pathways of this condition along with the clinical implications. Due to intrinsic structural properties of the crystals, they frequently escape detection by routine LM, necessitating EM analysis for their diagnosis. Given the prognostic implications of tubulopathies complicating myeloma, LCPT is a critically important diagnosis, highlighting the need for a comprehensive renal biopsy evaluation inclusive of EM for the practice of precision medicine in such scenarios.</p>	NAT	JUL TO DEC	Pathology, Wellcome Trust Research Laboratory, Nephrology, General Pathology	PMID: 32769341
396.	<p>Matthai, S. M., Mohapatra, A., Duhli, N., David, V. G. and Varughese, S. Collagenofibrotic glomerulopathy - A rare disease diagnosed with the aid of transmission electron microscopy</p>	NAT	JAN TO JUN	Nephrology, General Pathology	PMID:32108627 SCOPUS H-INDEX:30

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Indian J Pathol Microbiol; 2020, 63 (Supplement): S47-s49</p> <p>Address: Department of GI Sciences, Central Electron Microscopy Facility, Wellcome Trust Research Laboratory, Vellore, Tamil Nadu, India. Department of Nephrology, Christian Medical College, Vellore, Tamil Nadu, India. Department of General Pathology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Collagenofibrotic glomerulopathy (CFG) is a rare idiopathic kidney disease characterized by abnormal deposition of atypical Type III collagen fibers in the glomerulus causing subendothelial and mesangial expansion, manifesting as progressive renal dysfunction accompanied by proteinuria. The majority of CFG cases reported in literature are from Japan where this disease entity was initially recognized. There is an increased awareness and diagnosis of this rare renal disease in India with the recent increase in utilization of electron microscopy (EM) in clinical diagnostic settings. We describe a 28-year-old Bangladeshi woman who presented with hypertension and nephrotic range proteinuria not amenable to treatment with steroids and cyclophosphamide, whose renal biopsy demonstrated diagnostic ultrastructural features of CFG. This illustrative case is presented to highlight the role of EM analysis for diagnostic accuracy in renal biopsy evaluation in addition to demonstrating the unusual renal biopsy findings of this rare entity.</p>				IF: 0.521 BIOXBIO (2018/2019)
397.	<p>Mccormick, B. J. J., Caulfield, L. E., Richard, S. A., Pendergast, L., Seidman, J. C., Maphula, A., Koshy, B., Blacy, L., Roshan, R., Nahar, B., Shrestha, R., Rasheed, M., Svensen, E., Rasmussen, Z., Scharf, R. J., Haque, S., Oria, R. and Murray-Kolb, L. E. Early Life Experiences and Trajectories of Cognitive Development Pediatrics; 2020, 146 (3): Address: Fogarty International Center, National Institutes of Health, Bethesda, Maryland. Johns Hopkins University, Baltimore, Maryland. Temple University, Philadelphia, Pennsylvania. University of Venda, Thohoyandou, South Africa. Christian Medical College, Vellore, India. Haydom Lutheran Hospital, Haydom, Tanzania. icddr,b, Dhaka, Bangladesh. Tribhuvan University, Kathmandu, Nepal. Aga Khan University, Karachi, Pakistan. University of Bergen, Bergen, Norway. University of Virginia, Charlottesville, Virginia. Federal University of Ceara, Fortaleza, Brazil; and The Pennsylvania State University, University Park, Pennsylvania lem118@psu.edu. BACKGROUND: Multiple factors constrain the trajectories of child cognitive development, but the drivers that differentiate the trajectories are unknown. We</p>	INT	JUL TO DEC	Developmental Paediatrics	PMID: 32817437 PMC:7461241

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>examine how multiple early life experiences differentiate patterns of cognitive development over the first 5 years of life in low-and middle-income settings. METHODS: Cognitive development of 835 children from the Etiology, Risk Factors, and Interactions of Enteric Infections and Malnutrition and the Consequences for Child Health and Development (MAL-ED) multisite observational cohort study was assessed at 6, 15, 24 (Bayley Scales of Infant and Toddler Development), and 60 months (Wechsler Preschool and Primary Scale of Intelligence). Markers of socioeconomic status, infection, illness, dietary intake and status, anthropometry, and maternal factors were also assessed. Trajectories of development were determined by latent class-mixed models, and factors associated with class membership were examined by discriminant analysis. RESULTS: Five trajectory groups of cognitive development are described. The variables that best discriminated between trajectories included presence of stimulating and learning resources in the home, emotional or verbal responsiveness of caregiver and the safety of the home environment (especially at 24 and 60 months), proportion of days (0-24 months) for which the child had diarrhea, acute lower respiratory infection, fever or vomiting, maternal reasoning ability, mean nutrient densities of zinc and phytate, and total energy from complementary foods (9-24 months). CONCLUSIONS: A supporting and nurturing environment was the variable most strongly differentiating the most and least preferable trajectories of cognitive development. In addition, a higher quality diet promoted cognitive development while prolonged illness was indicative of less favorable patterns of development. conflicts of interest to disclose.</p>				
398.	<p>Mcnamara, K. M. Rhythms of care: Medical travels beyond the borders of Bangladesh East Asian Science, Technology and Society; 2020, 14 (1): 61-83</p> <p>Address: Christian Medical College, Vellore, India</p> <p>This article examines the experiences of Bangladeshi patients and their families as they travel transnationally within Asia for medical care. I explain how failures of biomedicine in Bangladesh feed into idealized expectations of care abroad. This medical imaginary is fueled by the hope that more expensive treatment in wealthier countries will result in better care, and it is sustained by the way the medical tourism industry operates and the way Bangladeshi patients and their families make choices and engage in the doing of care abroad. A detailed case study of a Bangladeshi cancer patient's prolonged care in Singapore illustrates the tensions and ambivalences in the quest for the best treatment. These tensions are exacerbated by the linguistic, monetary, and emotional challenges faced in traveling back and forth between countries. While patients feel at times betrayed by experiences of care that do not meet their expectations, they also feel compelled to carry on. I capture this dynamic in the term rhythms of care, understanding these as the way the medical imaginary shapes care practices that become a scaffolding</p>	INT	JAN TO JUN	Fulbright-Nehru scholar	<p>SCOPUS H-INDEX:14 IF: 0.470 RESURCHIFY (2018/2019)</p>

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	for hope to be maintained and further travel to be undertaken. I also reflect on how I become part of these rhythms by acting as the family's interpreter as they navigate health care in Singapore. © 2020 Ministry of Science and Technology, Taiwan				
399.	<p>McQuade, E. T. R., Liu, J., Kang, G., Kosek, M. N., Lima, A. A. M., Bessong, P. O., Samie, A., Haque, R., Mduma, E. R., Shrestha, S., Leite, J. P., Bodhidatta, L., Iqbal, N., Page, N., Kiwelu, I., Bhutta, Z., Ahmed, T., Houpt, E. R. and Platts-Mills, J. A.</p> <p>Protection From Natural Immunity Against Enteric Infections and Etiology-Specific Diarrhea in a Longitudinal Birth Cohort Journal of Infectious Diseases; 2020, 222 (11): 1858-1868</p> <p>Address: [McQuade, Elizabeth T. Rogawski] Univ Virginia, Dept Publ Hlth Sci, POB 801379, Charlottesville, VA 22908 USA. [McQuade, Elizabeth T. Rogawski; Liu, Jie; Kosek, Margaret N.; Houpt, Eric R.; Platts-Mills, James A.] Univ Virginia, Div Infect Dis & Int Hlth, Charlottesville, VA 22908 USA. [Kang, Gagandeep] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Kosek, Margaret N.] Assoc Benef PRISMA, Iquitos, Peru. [Lima, Aldo A. M.] Univ Fed Ceara, Fortaleza, Ceara, Brazil. [Bessong, Pascal O.; Samie, Amidou] Univ Venda, Thohoyandou, South Africa. [Haque, Rashidul; Ahmed, Tahmeed] Int Ctr Diarrheal Dis Res, Dhaka, Bangladesh. [Mduma, Estomih R.] Haydom Global Hlth Res Ctr, Haydom, Tanzania. [Shrestha, Sanjaya] Walter Reed AFRIMS Res Unit, Kathmandu, Nepal. [Leite, Jose Paulo] Fundacao Oswaldo Cruz Fiocruz, Rio De Janeiro, Brazil. [Bodhidatta, Ladaporn] Armed Forces Res Inst Med Sci AFRIMS, Bangkok, Thailand. [Iqbal, Najeeha; Bhutta, Zulfiqar] Aga Khan Univ, Karachi, Pakistan. [Page, Nicola] Natl Inst Communicable Dis, Johannesburg, South Africa. [Kiwelu, Ireen] Kilimanjaro Clin Res Inst, Moshi, Tanzania.</p> <p>McQuade, ETR (corresponding author), Univ Virginia, Dept Publ Hlth Sci, POB 801379, Charlottesville, VA 22908 USA. etr5m@virginia.edu</p> <p>Background. The degree of protection conferred by natural immunity is unknown for many enteropathogens, but it is important to support the development of enteric vaccines. Methods. We used the Andersen-Gill extension of the Cox model to estimate the effects of previous infections on the incidence of subsequent subclinical infections and diarrhea in children under 2 using quantitative molecular diagnostics in the MAL-ED cohort. We used cross-pathogen negative control associations to correct bias due to confounding by unmeasured heterogeneity of exposure and susceptibility. Results. Prior rotavirus infection was associated with a 50% lower hazard (calibrated hazard ratio [cHR], 0.50; 95% confidence interval [CI], 0.41-0.62) of subsequent rotavirus diarrhea. Strong protection was evident against Cryptosporidium diarrhea (cHR, 0.32; 95% CI, 0.20-0.51). There was also protection due to prior infections for norovirus GII (cHR against diarrhea, 0.67; 95% CI, 0.49-0.91), astrovirus (cHR, 0.62; 95% CI, 0.48-0.81), and Shigella (cHR, 0.79; 95% CI, 0.65-0.95). Minimal protection was observed for other bacteria, adenovirus 40/41, and sapovirus. Conclusions. Natural immunity was generally stronger for the enteric viruses than bacteria, potentially due to less antigenic</p>	INT	JUL TO DEC	Wellcome Research Unit	WOS:000605980600018

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	diversity. Vaccines against major causes of diarrhea may be feasible but likely need to be more immunogenic than natural infection.				
400.	<p>Means, A., Gwayi-Chore, M. C., Iitus, A., Gnanapu, Y., Togbevi, C. I., Chabi, F., Avokpaho, E., Luty, A. J. F., Ibikounlee, M., Ajjampur, S., Weiner, B., Walson, J. and Aruldas, K.</p> <p>Organizational readiness to implement soil-transmitted helminth elimination programs: Results from a three-country hybrid study Implementation Science; 2020, 15 1</p> <p>Address: [Means, Arianna; Gwayi-Chore, Marie-Claire; Weiner, Bryan; Walson, Judd] Univ Washington, Seattle, WA 98195 USA. [Iitus, Angel; Gnanapu, Yesudoss; Ajjampur, Sitara; Aruldas, Kumudha] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Togbevi, Comlanvi Innocent; Chabi, Felicien; Avokpaho, Euripide] Inst Rech Clin Benin, Abomey Calavi, Benin. [Luty, Adrian J. F.] Univ Paris, Paris, France. [Ibikounle, Moudachirou] Univ Abomey Calavi, Cotonou, Benin. aerubin@u.washington.edu</p>	INT	JAN TO JUN	Wellcome Research Unit	<p>WOS:000533323500093 H-INDEX:91 IF: 4.525 BIOXBIO (2018/2019)</p>
401.	<p>Medidi, A. and Salins, S. R.</p> <p>Comparison of the use of levobupivacaine with dexamethasone versus plain levobupivacaine in patients undergoing forearm surgeries under an infraclavicular block-a double-blinded randomized controlled trial International Journal of Research in Pharmaceutical Sciences; 2020, 11 (1): 39-43</p> <p>Address: Department of Anaesthesia, Christian Medical College, Vellore, Tamil Nadu 632004, India</p> <p>Regional anesthesia can provide greater patient satisfaction. An infraclavicular approach to block the brachial plexus aided with ultrasound is proven to be safe. Lesser toxic, levobupivacaine, advocates its use, with the addition of dexamethasone, to prolong the action. After approval from the ethics committee, the consenting patients, for orthopedic forearm surgeries, were recruited, randomized into two groups of 20 patients. Group-A, received 30mls of 0.5% levobupivacaine with dexamethasone 4mgs(1ml) and Group-B,30mls of 0.5% levobupivacaine and 1ml normal saline.18-70 Year olds, ASA I-III, weight greater than or equal to 50 kg, were included and non-consenting, coagulo-pathic, local infection, pregnant women, general anesthesia requirement, less than 50kg, allergy to local anesthetic, were excluded. Both groups received the infraclavicular block. The onset and duration of sensory and motor blockade were noted. Comparisons made at 3 and 20 minutes. Required data was acquired. Visual Analogue Scale(VAS)used to assess pain. The onset of sensory and motor blockade was assessed and graded separately on radial, median and ulnar nerves, with significant findings of about 70-80% in Group-A at 4-5 minutes,80-87% complete at 20 minutes.87.5% Patients in both groups achieved adequate surgical anesthesia. There was a significant improvement in sensory grading of the median nerve and</p>	INT	JAN TO JUN	Anaesthesia	<p>SCOPUS H-INDEX:15 IF: 0.080 BIOXBIO (2018/2019)</p>

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	<p>ulnar nerve between at 3 minutes and 20 minutes and also in motor grading improvement at 20 minutes duration in the Group-A than Group-B. Postoperatively, the VAS score showed scores hovering around 1-4, over 24 hours, with no difference, in scores, duration, and use of rescue analgesia in both arms. There were no statistical differences in the onset and duration of sensory and motor blockade in both groups, with some difference in the quality of analgesia between the nerves studied in group-A. Although a larger sample size might have brought out some difference in pain scores, with the addition of dexamethasone, its clinical implication is doubtful. © 2020 International Journal of Research in Pharmaceutical Sciences. All rights reserved.</p>				
402.	<p>Mehta, Y., Chaudhry, D., Abraham, O. C., Chacko, J., Divatia, J., Jagiasi, B., Kar, A., Khilnani, G. C., Krishna, B., Kumar, P., Mani, R. K., Rao, B. K., Singh, P. K., Singh, S., Tiwary, P., Wattal, C., Govil, D., Dixit, S. and Samavedam, S.</p> <p>Critical Care for COVID-19 Affected Patients: Updated Position Statement of the Indian Society of Critical Care Medicine Indian J Crit Care Med; 2020, 24 (Suppl 5): S225-S230</p> <p>Address: Department of Critical Care and Anesthesiology, Medanta: The Medicity, Gurugram, Haryana, India. Department of Pulmonary and Critical Care, Pandit Bhagwat Dayal Sharma Post Graduate Institute of Medical Sciences, Rohtak, Haryana, India. Infectious Disease Medicine, Christian Medical College, Vellore, Tamil Nadu, India. Critical Care Medicine, Narayana Hrudyalaya, Bengaluru, Karnataka, India. Critical Care and Anesthesia, Tata Memorial Centre, Homi Bhabha National Institute, Mumbai, Maharashtra, India. Department of Critical Care, Reliance Hospital, Navi Mumbai, Maharashtra, India. CK Birla Hospitals, Gurugram, Haryana, India; CMRI Institute of Critical Care, Kolkata, West Bengal, India; Indian Society of Critical Care Medicine; European Society of Intensive Care Medicine. Department of Pulmonary, Critical Care and Sleep Medicine, PSRI Hospital, New Delhi, India. Department of Critical Care Medicine, St. John's Hospital, Bengaluru, Karnataka, India. Department of Anaesthesiology, Pandit Bhagwat Dayal Sharma Post Graduate Institute of Medical Sciences, Rohtak, Haryana, India. Critical Care and Pulmonology, Batra Hospital and Medical Research Centre, New Delhi, India. Department of Critical Care and Emergency Medicine, Sir Ganga Ram Hospital, New Delhi, India. Amrita Institute of Medical Sciences, Ernakulam, Kerala, India; Amrita Hospitals, Faridabad, Haryana, India. All India Institute of Medical Sciences, New Delhi, India.</p>	NAT	JUL TO DEC	Infectious Disease Medicine	<p>PMID:33354047 PMC ID:7724933</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Clinical Microbiology and Immunology, Sir Ganga Ram Hospital, New Delhi, India. Institute of Critical Care and Anesthesiology, Medanta: The Medicity, Gurugram, Haryana, India. Department of Critical Care Medicine, Sanjeevan and MJM Hospital, Pune, Maharashtra, India. Department of Critical Care, Virinchi Hospital, Hyderabad, Telangana, India.</p> <p>The management of coronavirus disease-2019 (COVID-19) is witnessing a change as we learn more about the pathophysiology and the severity of the disease. Several randomized controlled trials (RCTs) and meta-analysis have been published over the last few months. Several interventions and therapies which showed promise in the initial days of the pandemic have subsequently failed to show benefit in well-designed trials. Understanding of the methods of oxygen delivery and ventilation have also evolved over the past few months. The Indian Society of Critical Care Medicine (ISCCM) has reviewed the evidence that has emerged since the publication of its position statement in May and has put together an addendum of updated evidence. How to cite this article: Mehta Y, Chaudhry D, Abraham OC, Chacko J, Divatia J, Jagiasi B, et al. Critical Care for COVID-19 Affected Patients: Position Statement of the Indian Society of Critical Care Medicine. Indian J Crit Care Med 2020;24(Suppl 5):S225-S230.</p>				
403.	<p>Melendez-Calderon, A., Shirota, C. and Balasubramanian, S. Estimating Movement Smoothness From Inertial Measurement Units Front Bioeng Biotechnol; 2020, 8 558771</p> <p>Address: Cereneo Advanced Rehabilitation Institute (CARING), Vitznau, Switzerland. Biomedical Engineering Group, School of Information Technology and Electrical Engineering, The University of Queensland, St. Lucia, QLD, Australia. Department of Physical Medicine and Rehabilitation, Northwestern University, Chicago, IL, United States. The Hopkins Centre, Menzies Health Institute Queensland, Griffith University, Nathan, QLD, Australia. Department of Health Sciences and Technology, ETH Zurich, Zurich, Switzerland. Department of Neurology, University of Zurich, Zurich, Switzerland. Department of Bioengineering, Christian Medical College, Vellore, India.</p> <p>Inertial measurement units (IMUs) are increasingly used to estimate movement quality and quantity to the infer the nature of motor behavior. The current literature contains several attempts to estimate movement smoothness using data from IMUs, many of which assume that the translational and rotational kinematics measured by IMUs can be directly used with the smoothness measures spectral arc length (SPARC) and log dimensionless jerk (LDLJ-V). However, there has been no investigation of the validity of these approaches. In this paper, we systematically</p>	INT	JUL TO DEC	Bioengineering	PMID:33520949 PMC ID:7841375

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	evaluate the use of these measures on the kinematics measured by IMUs. We show that: (a) SPARC and LDLJ-V are valid measures of smoothness only when used with velocity; (b) SPARC and LDLJ-V applied on translational velocity reconstructed from IMU is highly error prone due to drift caused by integration of reconstruction errors; (c) SPARC can be applied directly on rotational velocities measured by a gyroscope, but LDLJ-V can be error prone. For discrete translational movements, we propose a modified version of the LDLJ-V measure, which can be applied to acceleration data (LDLJ-A). We evaluate the performance of these measures using simulated and experimental data. We demonstrate that the accuracy of LDLJ-A depends on the time profile of IMU orientation reconstruction error. Finally, we provide recommendations for how to appropriately apply these measures in practice under different scenarios, and highlight various factors to be aware of when performing smoothness analysis using IMU data.				
404.	<p>Mertz, P., Belot, A., Cervera, R., Chuah, T. Y., Dagna, L., Damian, L., Danda, D., D'cruz, D., Espinosa, G., Frances, C., Jayne, D., Ooi, K. K., Kucharz, E. J., Lebovics, R., Marie, L., Moulis, G., Peng, S., Sharma, A., Suzuki, N., Tanaka, T., Van Vollenhoven, R., Sibilia, J., Gottenberg, J. E., Chasset, F. and Arnaud, L.</p> <p>The relapsing polychondritis damage index (RPDAM): Development of a disease-specific damage score for relapsing polychondritis Revue du Rhumatisme (Edition Francaise); 2020, 87 (2): 122-127</p> <p>Address: Service de rhumatologie, centre de référence des maladies auto-immunes et systémiques rares Est-Sud-Ouest (RESO), hôpital de Hautepierre, 1, avenue Molière BP 83049, Strasbourg cedex, 67098, France INSERM UMR-S1109, Strasbourg cedex, 67098, France Service de néphrologie pédiatrique, rhumatologie, dermatologie, hôpital femme-mère-enfant, Bron, France Service des maladies auto-immunes, institut clinique de médecine et dermatologie, Hôpital Clinique, Barcelone, Spain Service de rhumatologie et d'immunologie, hôpital général de Singapour, Singapore Unité d'immunologie, rhumatologie, allergie et maladies rares (UnIRAR), institut scientifique San Raffaele IRCCS, université Vita-Salute Sans Raffaele, Milan, 20132, Italy Service de rhumatologie, Spitalul clinic Judetean de Urgenta Cluj, Cluj-Napoca, Romania Service d'immunologie clinique et de rhumatologie, Christian Medical College, Vellore, India Unité de soins du lupus Louise-Coote, Guy's Hospital, London, United Kingdom Service de dermatologie, hôpital Tenon, Paris, France Service de médecine, université de Cambridge, Cambridge, United Kingdom Unité de rhumatologie, hôpital universitaire National, Singapour city, Singapore Faculté de médecine de Yong-Loo-Lin, National University, Singapour city, Singapore</p>	INT	JAN TO JUN	Clinical Immunology and Rheumatology	<p>SCOPUS H-INDEX:13 IF: 0.010 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Service de médecine interne et rhumatologie, université médicale de Silesia, Katowice, Poland</p> <p>Service d'oto-laryngologie, from Mount-Sinai-St.-Luke's et Mount-Sinai-Roosevelt affiliés à la faculté de médecine Icahn school au Mount-Sinai, New York, NY, United States</p> <p>Service de médecine interne, CHU de Rouen-Bois-Guillaume, Rouen cedex, France</p> <p>Service de médecine interne, CHU de Toulouse, Toulouse, France</p> <p>UMR 1027 Inserm-Université de Toulouse, Toulouse, France</p> <p>CIC 1436, CHU de Toulouse, Toulouse, France</p> <p>Swedish Medical Center, Seattle, WA, United States</p> <p>Unités d'immunologie clinique et rhumatologie, service de médecine interne, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, 160012, India</p> <p>Institut des sciences médicales et service d'immunologie et de médecine, faculté de médecine St.-Marianna, Kawasaki, 216-8511, Japan</p> <p>Service d'application clinique en recherche biologique, Osaka University Graduate School of Medicine, Osaka University, Osaka, 565-0871, Japan</p> <p>Service d'immunologie clinique et de rhumatologie, Academic Medical Center, Amsterdam, Netherlands</p>				
405.	<p>Mf Rahman, S., Brown, J. B., David, K. V. and Valliere, Y.</p> <p>Building family medicine into the primary health care system in India through under-graduate and post-graduate education</p> <p>Educ Prim Care; 2020, 1-2</p> <p>Address: Department of Family Medicine, Christian Medical College, Vellore, India, sajithaparveenmf@gmail.com.</p> <p>Department of Family Medicine, Schulich School of Medicine and Dentistry, Western University London, Ontario, Canada.</p> <p>Department of Family Medicine, Christian Medical College, Vellore, India.</p>	INT	JUL TO DEC	Family Medicine	PMID: 33053317
406.	<p>Misale, P., Lepcha, A., Thomas, P., Sebastian, S. and Sebastian, T.</p> <p>Normative data for cortical evoked response audiometry of a heterogeneous Indian population and its comparison with behavioral audiometry</p> <p>Annals of Indian Academy of Neurology; 2020, 23 (3): 296-302</p> <p>Address: Department of ENT Unit 4, Christian Medical College, Vellore, Tamil Nadu, India</p> <p>Department of Audiology, Christian Medical College, Vellore, Tamil Nadu, India</p> <p>Department of Statistics, Christian Medical College, Vellore, Tamil Nadu, India</p> <p>Objective: The objective of the study is to establish normative values of cortical evoked response audiometry (CERA) in a heterogeneous Indian population and correlate CERA threshold with pure tone audiometric (PTA) threshold values. Materials and Methods: A prospective study was carried out on 31 volunteers (n = 62) who had no otological or neurological complaints. Two study groups were</p>	NAT	JAN TO JUN	ENT Unit 4, Audiology, Biostatistics	SCOPUS H-INDEX:27 IF: 0.898 BIOXBIO (2018/2019)

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	formed; Group 1 with individuals from 20 to 40 years (mean age of 29.1 years) and Group 2 with individuals from 41 to 60 years (mean age of 46.2 years). The latencies and amplitudes of the waves of P1, N1, and P2 at threshold and 70 dBnHL were measured. Results: Twenty-nine participants (94% of the ears) had CERA threshold within 20 dB of true behavioral threshold with only 6% having a difference of >20 dB with their PTA thresholds. There was a significant difference (P < 0.05) at 70 dB in amplitudes for waves P1, N1, and P2 at 2 kHz and additionally at 1 kHz for N1 between the two groups. Conclusion: Normative values for CERA in a heterogeneous Indian population at 70 dB nHL using tone burst stimulus was found to have an average latency of 46.5, 90.1, and 155.5 ms for P1, N1, and P2, respectively. The average amplitude of P1 at 70 dB nHL was 4.3 μV, N1, was 6.5 μV and P2 was 3.2 μV. Hearing threshold obtained with CERA gave a good indication of the actual behavioral hearing threshold of the normal controls, and the age of an individual had a significant effect on the values obtained during CERA testing with N1 being significantly larger at 1 kHz and 2 kHz in older adults when compared to young adults. © 2006 - 2020 Annals of Indian Academy of Neurology IF: Published by Wolters Kluwer - Medknow.				
407.	Mishra, A. K., Sahu, K. K., George, A. A. and Lal, A. Safety and Efficacy of Thrombolysis and Mechanical Thrombectomy in Infective Endocarditis J Stroke Cerebrovasc Dis; 2020, 29 (6): 104784 Address: Department of Internal Medicine, Saint Vincent Hospital, Worcester, Massachusetts. Electronic Address: Ajay.Mishra@stvincenthospital.com . Department of Internal Medicine, Saint Vincent Hospital, Worcester, Massachusetts. Department of Dermatology, CMC, Vellore , Tamil Nadu, India. Department of Critical Care, Mayo Clinic, Rochester, Minnesota.	INT	JAN TO JUN	Dermatology	PMID:32205025 H-INDEX:55 IF: 1.646 BIOXBIO (2018/2019)
408.	Mishra, S., Kulkarni, U., Mathews, N., V, R., Ch Nair, S., George, B. and Mammen, J. J. A study to compare Hematopoietic Progenitor Cell count determined on a next-generation automated cell counter with flow cytometric CD34 count in peripheral blood and the harvested peripheral blood stem cell graft from autologous and allogenic donors Int J Lab Hematol; 2020, Address: Department of Transfusion Medicine and Immuno-haematology, Vellore , India. Department of Haematology, Christian Medical College and Hospital, Vellore , India. INTRODUCTION: A successful bone marrow transplant requires a minimum of 2-4 × 10(6) cells/kg patient body weight of CD 34+ cells to be transfused, where peripheral blood CD34+ cell count being and ideal predictor. We compared the correlation and predictive capacity of both hematopoietic progenitor cell count (HPC) determined on the Sysmex XN-9000 and flow cytometric CD34 in autologous	INT	JUL TO DEC	Haematology	PMID: 32926561

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	and allogenic donors. METHODS: Autologous and allogenic donors were taken as per criteria. TLC (Total Leukocyte Count), MNC (Mononuclear cell count), HPC, and CD34 assay were done in both the peripheral blood prior to apheresis, and the harvest product postapheresis. Sysmex XN-9000 was used for TLC, MNC, and HPC tests, and a modified ISH-AGE protocol was used to enumerate CD34 by flow cytometry. Statistical analysis was done using SPSS 16.0. RESULTS: Sixty-seven allogenic and 35 autologous donors were enrolled. 45% were females, and 55% were males. Correlation between HPC and CD34 was found to be 0.887 with P value < .01 in peripheral blood and 0.847 with P value < .01 in the harvested product. On the other hand, TLC had a correlation of 0.424 and 0.520 in peripheral blood and harvested, respectively. MNC had a weak association. The cutoff value for a target dose of $2 \times 10(6)$ CD34 cells/kg was $37 \times 10(6)$ /L for pre-HPC. For a target of $4 \times 10(6)$ CD34 cells/kg, the cutoff value calculated to be $54 \times 10(6)$ /L (Sensitivity: 85%, Specificity: 89%) for peripheral blood HPC. CONCLUSION: We conclude that HPC is comparable to CD34 in predicting harvest product's adequacy.				
409.	<p>Mistry, P. K., Lukina, E., Ben Turkia, H., Shankar, S., Feldman, H. B., Ghosn, M., Mehta, A., Packman, S., Lau, H., Petakov, M., Assouline, S., Balwani, M., Danda, S., Hadjiev, E., Ortega, A., Foster, M. C., Gaemers, S. J. M. and Peterschmitt, M. J.</p> <p>Individual patient responses to eliglustat in treatment-naive adults with Gaucher disease type 1: Final data from the phase 3 ENGAGE trial Molecular Genetics and Metabolism; 2020, 129 (2): S110-S111</p> <p>Address: [Mistry, Pramod K.] Yale Univ, Sch Med, New Haven, CT USA. [Lukina, Elena] Natl Res Ctr Hematol, Moscow, Russia. [Ben Turkia, Hadhami] Hop La Rabta, Tunis, Tunisia. [Shankar, Suma] Emory Univ, Atlanta, GA 30322 USA. [Feldman, Hagit Baris] Tel Aviv Sourasky Med Ctr, Genet Inst, Tel Aviv, Israel. [Feldman, Hagit Baris] Tel Aviv Univ, Sackler Fac Med, Tel Aviv, Israel. [Ghosn, Marwan] Hotel Dieu France Univ Hosp, Beirut, Lebanon. [Mehta, Atul] Royal Free Hosp, London, England. [Packman, Seymour] Univ Calif San Francisco, Sch Med, San Francisco, CA USA. [Lau, Heather] NYU, Sch Med, New York, NY USA. [Petakov, Milan] Univ Belgrade, Sch Med, Clin Ctr Serbia, Belgrade, Serbia. [Assouline, Sarit] Jewish Gen Hosp, Montreal, PQ, Canada. [Balwani, Manisha] Icahn Sch Med Mt Sinai, New York, NY 10029 USA. [Danda, Sumita] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Hadjiev, Evgueniy] Univ Hosp Alexandrovska, Sofia, Bulgaria. [Ortega, Andres] OCA Hosp, Monterrey, Mexico. [Foster, Meredith C.; Peterschmitt, M. Judith] Sanofi Genzyme, Cambridge, MA USA. [Gaemers, Sebastiaan J. M.] Sanofi Genzyme, Amsterdam, Netherlands.</p>	INT	JAN TO JUN	Clinical Genetics	<p>WOS:000510805200294 H-INDEX:104 IF: 2.690 BIOXBIO (2018/2019)</p>
410.	<p>Mitra, A., Ghosh, R. K., Bandyopadhyay, D., Ghosh, G. C., Kalra, A. and Lavie, C. J.</p> <p>Significance of Pulmonary Hypertension in Hypertrophic Cardiomyopathy Current Problems in Cardiology; 2020, 45 (6): 11</p> <p>Address: [Mitra, Anupam] VA Med Ctr Sacramento, Mather, CA 95655 USA. [Ghosh, Raktim Kumar] Case Western Reserve Univ, Inst Heart & Vasc, MetroHlth Med Ctr,</p>	INT	JAN TO JUN	Cardiology	<p>WOS:000528279400001 H-INDEX:46 IF: 3.333 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Cleveland, OH 44106 USA. [Bandyopadhyay, Dhruvajyoti] Mt Sinai St Lukes Roosevelt, New York, NY USA. [Ghosh, Gopal Chandra] Christian Med Coll & Hosp, Dept Cardiol, Vellore, Tamil Nadu, India. [Kalra, Ankur] Case Western Reserve Univ, Harrington Heart & Vasc Inst, Univ Hosp Cleveland Med Ctr, Med Cardiol, Div Cardiovasc Med, Dept Med, Sch Med, Cleveland, OH 44106 USA. [Lavie, Carl J.] Univ Queensland, John Ochsner Heart & Vasc Inst, Dept Cardiol, Ochsner Clin Sch, Sch Med, New Orleans, LA USA.</p> <p>Mitra, A (reprint author), VA Med Ctr Sacramento, Mather, CA 95655 USA. dranupammitra@gmail.com; raktimghoshmd@gmail.com; drdhrubajyoti87@gmail.com; gcghosh86@gmail.com; kalramd.ankur@gmail.com; clavie@ochsner.org</p> <p>Hypertrophic cardiomyopathy (HCM) is the most prevalent hereditary cardiac disease characterized by the presence of left ventricular and/or septal hypertrophy in the absence of other underlying cardiac disorders. Patients of HCM have a broad range of clinical presentation from being asymptomatic to severely ill condition requires hospitalization and urgent management. Broadly, HCM is classified in two variants: obstructive and nonobstructive. The mainstay of diagnosis is through echocardiography. As HCM chiefly affect the left heart, pulmonary hypertension (PH) is an expected complication of this disease. Though the existence of PH in HCM is known for a long time, its clinical significance, underlying mechanism, and prognostic impact in HCM have been revealed by few recent studies. Specifically, studies have shown increased events of thromboembolism, atrial fibrillation, and heart failure in patients with HCM and PH. These studies elucidated the underlying mechanism of PH in HCM-a rise of pressure in the precapillary and postcapillary pulmonary vasculature. In addition to left ventricular involvement, studies have shown right ventricular involvement and the association of left and right ventricular dysfunction in these patients. Further, it has been shown that surgical intervention to reduce septal thickness improves survival in pharmacotherapy nonresponders and the presence of PH does not increase mortality in these patients. We present a comprehensive review exploring the prevalence, underlying mechanisms, and impact of PH on HCM.</p>				
411.	<p>Modi, G. K., Yadav, A. K., Ghosh, A., Kamboj, K., Kaur, P., Kumar, V., Bhansali, S., Prasad, N., Sahay, M., Parameswaran, S., Varughese, S., Gang, S., Singh, S., Sircar, D., Gopalakrishnan, N., Jaryal, A., Vikrant, S., Agarwal, S. B. and Jha, V.</p> <p>Nonmedical Factors and Health-Related Quality of Life in CKD in India Clinical Journal of the American Society of Nephrology; 2020, 15 (2): 191-199</p> <p>Address: [Modi, Gopesh K.] Samarpan Kidney Inst & Res Ctr, Nephrol, Bhopal, India. [Yadav, Ashok K.] Post Grad Inst Med Educ & Res, Dept Expt Med & Biotechnol, Chandigarh, India. [Kamboj, Kajal; Kaur, Prabhjot; Kumar, Vivek; Bhansali, Shobhit] Post Grad Inst Med Educ & Res, Dept Nephrol, Chandigarh, India. [Ghosh, Arpita; Jha, Vivekanand] Univ New South Wales, George Inst Global Hlth,</p>	INT	JAN TO JUN	Nephrology	WOS:000525582500008 SCOPUS H-INDEX:141 IF: 1.605 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>New Delhi, India. [Prasad, Narayan] Sanjay Gandhi Postgrad Inst Med Sci, Dept Nephrol, Lucknow, Uttar Pradesh, India. [Sahay, Manisha] Osmania Gen Hosp, Osmania Med Coll, Dept Nephrol, Hyderabad, India. [Parameswaran, Sreejith] Jawaharlal Inst Postgrad Med Educ & Res, Dept Nephrol, Pondicherry, India. [Varughese, Santosh] Christian Med Coll & Hosp, Dept Nephrol, Vellore, Tamil Nadu, India. [Gang, Sishir] Muljibhai Patel Urol Hosp, Dept Nephrol, Nadiad, India. [Singh, Shivendra] Banaras Hindu Univ, Inst Med Sci, Dept Nephrol, Varanasi, Uttar Pradesh, India. [Sircar, Dipankar] Inst Post Grad Med Educ & Res, Dept Nephrol, Kolkata, India. [Gopalakrishnan, Natarajan] Rajiv Gandhi Govt Gen Hosp, Dept Nephrol, Chennai, Tamil Nadu, India. [Jaryal, Ajay; Vikrant, Sanjay] Indira Gandhi Med Coll, Dept Nephrol, Shimla, India. [Agarwal, Seema Baid] Univ Gothenburg, Sahlgrenska Univ Hosp, Dept Nephrol, Gothenburg, Sweden. [Agarwal, Seema Baid] Univ Gothenburg, Sahlgrenska Univ Hosp, Transplant Ctr, Gothenburg, Sweden. [Jha, Vivekanand] Manipal Acad Higher Educ, Manipal, Karnataka, India. [Jha, Vivekanand] Univ Oxford, Oxford, England. Jha, V (reprint author), Jasola Dist Ctr, George Inst Global Hlth, 311-312 Third Floor, Elegance Tower, Plot 8, New Delhi 110025, India. viha@georgeinstitute.org.in</p> <p>Background and objectives Patient-reported outcomes have gained prominence in the management of chronic noncommunicable diseases. Measurement of health-related quality of life is being increasingly incorporated into medical decision making and health care delivery processes. Design, setting, participants, & measurements The Indian Chronic Kidney Disease Study is a prospective cohort of participants with mild to moderate CKD. Baseline health-related quality of life scores, determined by the standardized Kidney Disease Quality of Life 36 item instrument, are presented for the inception cohort (n=2919). Scores are presented on five subscales: mental component summary, physical component summary, burden, effect of kidney disease, and symptom and problems; each is scored 0-100. The associations of socioeconomic and clinical parameters with the five subscale scores and lower quality of life (defined as subscale score <1 SD of the sample mean) were examined. The main socioeconomic factors studied were sex, education, occupation, and income. The key medical factors studied were age, eGFR, diabetes, hypertension, and albuminuria. Results The mean (SD) subscale scores were physical component summary score, 43.9; mental component summary score, 48.10; burden, 61.33; effects, 87.13; and symptoms, 90.20. Among the socioeconomic variables, women, lower education, and lower income were negatively associated with reduced scores across all subscales. For instance, the respective β-coefficients (SD) for association with the physical component summary subscale were -2.6 (3.4 to 1.8), 1.5 (2.2 to 0.7), and 1.6 (2.7 to 0.5). Medical factors had inconsistent or no association with subscale scores. The quality of life scores also displayed regional variations. Conclusions In this first of its kind analysis from India, predominantly socioeconomic factors were associated with quality of life scores in patients with CKD.</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
412.	<p>Moorthy, M. and Fletcher, J. SARS-CoV-2 Laboratory Testing in India's Pandemic Response: A Public Health Perspective Indian J Public Health; 2020, 64 (Supplement): S128-s131</p> <p>Address: Professor, Department of Clinical Virology, Christian Medical College, Vellore, Tamil Nadu, India. Associate Professor, Department of Clinical Virology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has resulted (at the time of writing) in over 3.3 million cases and 233,000 deaths globally and ~33,000 cases and ~1,100 deaths in India. The mainstay of the diagnosis is a reverse-transcription polymerase chain reaction assay to detect SARS-CoV-2 RNA. The accurate diagnosis is contingent on appropriate specimen choice, time of collection, and assay employed. In this commentary, we highlight the role of laboratory diagnostic tests used in the different stages of India's COVID-19 pandemic response.</p>	NAT	JAN TO JUN	Clinical Virology	<p>PMID:32496242 SCOPUS H-INDEX:23 IF: 0.450 RG (2018/2019)</p>
413.	<p>Moorthy, R. K. and Rajshekhhar, V. Impact of COVID-19 Pandemic on Neurosurgical Practice in India: A Survey on Personal Protective Equipment Usage, Testing, and Perceptions on Disease Transmission Neurol India; 2020, 68 (5): 1133-1138</p> <p>Address: Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND: There is a significant knowledge gap and anxiety among health care workers (HCWs) including neurosurgeons regarding in-hospital disease transmission and use of personal protective equipment (PPE) during the ensuing COVID-19 pandemic. OBJECTIVE: To assess present practice and perceptions among Indian neurosurgeons with respect to type of surgeries performed, PPE usage and SARS-CoV-2 testing. MATERIALS AND METHODS: A 12-item questionnaire on surgeries performed in the 6 weeks prior to the survey date, PPE usage, and preoperative SARS-CoV-2 testing was circulated electronically to Indian neurosurgeons from May 12, 2020 to May 31, 2020 and their responses analyzed. RESULTS: Two hundred forty-four neurosurgeons (237 males) participated in the survey; of whom, 230 had performed surgeries during the pandemic period. In total, 84.3% of respondents were performing semiemergency or emergency procedures only. N95 masks were utilized by only 83% of the respondents (n = 230) while performing surgical procedures. Only 40.9% of the respondents were satisfied regarding adequacy of available PPE. Preoperative SARS-CoV2 testing as well as testing of all asymptomatic patients prior to admission into ward/intensive care unit was perceived to be beneficial in reducing transmission risk by more than 85% respondents. More than 90% respondents felt that HCWs including</p>	NAT	JUL TO DEC	Neurological Sciences	<p>PMID: 33109863 WOS:000596153700030</p>

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	neurosurgeons were at risk of acquiring infection through an outpatient consultation from an asymptomatic individual. CONCLUSIONS: Access to and utilization of appropriate PPE was lacking among the one-fifth of neurosurgeons who participated in this survey. To gain the confidence of neurosurgeons, hospitals should address their concerns regarding PPE and testing of patients prior to surgery and admission to the hospital.				
414.	<p>Moorthy, R. K., Backianathan, S., Rebekah, G. and Rajshekhar, V. Utility of interval imaging during focused radiation therapy for residual cystic craniopharyngiomas World Neurosurg; 2020, 141 e615-e624</p> <p>Address: Department of Neurological Sciences, Christian Medical College, Vellore, Tamilnadu, India. Electronic Address: ranjith@cmVellore.ac.in. Department of Radiation Therapy, Christian Medical College, Vellore, Tamilnadu, India. Department of Biostatistics, Christian Medical College, Vellore, Tamilnadu, India. Department of Neurological Sciences, Christian Medical College, Vellore, Tamilnadu, India.</p> <p>OBJECTIVE: To study the changes in cyst volume detected on interval computed tomography (CT) in patients undergoing radiation therapy (RT) for residual cystic craniopharyngiomas after surgery. MATERIALS & METHODS: A retrospective analysis of CT scans done halfway during the course of RT for residual cystic craniopharyngiomas between January 2005 and January 2018 was performed to assess the incidence of cyst expansion requiring additional intervention. Possible risk factors for cyst expansion during RT were analyzed. RESULTS: 33 patients (23 males) of median age 15 years (IQR, 8-21 years) who underwent surgical excision (n =30) or aspiration (n = 3) of cystic craniopharyngiomas followed by stereotactic (n=25) or conformal (n=8) RT were included. The extent of reduction in tumour volume following surgery was 66.5±17.9% (range, 20.6% to 88.9%). Six (18.2%) of the 33 patients had a median increase in cyst volume of 11.1cc (IQR,9.1 to 12.1cc; range - 6.3 to 40cc) that was beyond the initial planned target volume (PTV) and necessitated additional surgical intervention. Four of the six patients in whom the cyst showed increase in volume underwent cyst aspiration followed by re-planning of RT and two patients underwent re-planning of RT alone without additional surgical intervention. In 5 of these 6 patients, the increase in cyst volume was asymptomatic. Younger age (p=0.002) and larger residual cyst wall (p = 0.009) were found to be risk factors for early cyst expansion. CONCLUSIONS: Cyst expansion occurs in nearly one-fifth of patients with cystic craniopharyngiomas during the course of RT. As nearly all these expansions are asymptomatic, interval CT scans midway through RT are essential to avoid geographical miss of the tumour.</p>	INT	JAN TO JUN	Neurological Sciences, Radiation Therapy, Biostatistics, Neurological Sciences	PMID:32522649 H-INDEX:90 IF: 1.723 BIOXBIO (2018/2019)
415.	Mpekris, F., Panagi, M., Voutouri, C., Martin, J. D., Samuel, R., Takahashi, S., Gotohda,	INT	JUL TO DEC	Centre for Stem Cell Research	WOS:000598258400001

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>N., Suzuki, T., Papageorgis, P., Demetriou, P., Pierides, C., Koumas, L., Costeas, P., Kojima, M., Ishii, G., Constantinidou, A., Kataoka, K., Cabral, H. and Stylianopoulos, T.</p> <p>Normalizing the Microenvironment Overcomes Vessel Compression and Resistance to Nano-immunotherapy in Breast Cancer Lung Metastasis Advanced Science;</p> <p>Address: [Mpekris, Fotios; Panagi, Myrofora; Voutouri, Chrysovalantis; Stylianopoulos, Triantafyllos] Univ Cyprus, Dept Mech & Mfg Engn, Canc Biophys Lab, CY-1678 Nicosia, Cyprus. [Martin, John D.; Cabral, Horacio] Univ Tokyo, Grad Sch Engn, Dept Bioengn, Bunkyo Ku, Tokyo 1138656, Japan. [Samuel, Rekha] Christian Med Coll Campus Bagayam, Ctr Stem Cell Res, Vellore 560065, Tamil Nadu, India. [Takahashi, Shinichiro; Gotohda, Naoto; Suzuki, Toshiyuki] Natl Canc Ctr Hosp East, Dept Hepatobiliary Pancreat Surg, Kashiwa, Chiba 2778577, Japan. [Papageorgis, Panagiotis] European Univ Cyprus, Dept Life Sci, Program Biol Sci, CY-2404 Nicosia, Cyprus. [Demetriou, Philippos; Pierides, Chryso; Koumas, Laura; Costeas, Paul] Ctr Study Haematol & Other Malignancies, CY-2032 Nicosia, Cyprus. [Koumas, Laura] Karaiskaki Fdn, CY-2032 Nicosia, Cyprus. [Costeas, Paul; Constantinidou, Anastasia] Cyprus Canc Res Inst, CY-2032 Nicosia, Cyprus. [Kojima, Motohiro; Ishii, Genichiro] Natl Canc Ctr, Exploratory Oncol Res & Clin Trial Ctr, Kashiwa, Chiba 2778577, Japan. [Constantinidou, Anastasia] Univ Cyprus, Med Sch, CY-1678 Nicosia, Cyprus. [Constantinidou, Anastasia] Bank Cyprus, Oncol Ctr, CY-2012 Nicosia, Cyprus. [Kataoka, Kazunori] Kawasaki Inst Ind Promot, Innovat Ctr NanoMed, Kawasaki, Kanagawa 2100821, Japan. [Kataoka, Kazunori] Univ Tokyo, Inst Future Initiat, Bunkyo Ku, Tokyo 1130033, Japan.</p> <p>Stylianopoulos, T (corresponding author), Univ Cyprus, Dept Mech & Mfg Engn, Canc Biophys Lab, CY-1678 Nicosia, Cyprus. tstylian@ucy.ac.cy</p> <p>Nano-immunotherapy regimens have high potential to improve patient outcomes, as already demonstrated in advanced triple negative breast cancer with nanoparticle albumin-bound paclitaxel and the immune checkpoint blocker (ICB) atezolizumab. This regimen, however, does not lead to cures with median survival lasting less than two years. Thus, understanding the mechanisms of resistance to and development of strategies to enhance nano-immunotherapy in breast cancer are urgently needed. Here, in human tissue it is shown that blood vessels in breast cancer lung metastases are compressed leading to hypoxia. This pathophysiology exists in murine spontaneous models of triple negative breast cancer lung metastases, along with low levels of perfusion. Because this pathophysiology is consistent with elevated levels of solid stress, the mechanotherapeutic tranilast, which decompressed lung metastasis vessels, is administered to mice bearing metastases, thereby restoring perfusion and alleviating hypoxia. As a result, the nanomedicine Doxil causes cytotoxic effects into metastases more efficiently, stimulating anti-tumor immunity. Indeed, when combining tranilast with Doxil and ICBs, synergistic effects on efficacy, with all mice cured in one of the two ICB-</p>				

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	insensitive tumor models investigated is resulted. These results suggest that strategies to treat breast cancer with nano-immunotherapy should also include a mechanotherapeutic to decompress vessels.				
416.	<p>Muliyil, J. P. A science-based response to COVID-19 Indian J Public Health; 2020, 64 (Supplement): S90</p> <p>Address: Former Principal and Head, Department of Community Health, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>The COVID-19 pandemic behaves like many other viruses spread through respiratory routes. This is generally a mild disease for those aged less than 50 years. A complete and prolonged lockdown will reduce COVID-19 mortality but simultaneously lead to a graver public health, social, and economic disaster. The focus has to be based on the reality that exists in an area.</p>	NAT	JAN TO JUN	Community Health	<p>PMID:32496231 SCOPUS H-INDEX:23 IF: 0.450 RG (2018/2019)</p>
417.	<p>Muniswami, D. M., Reddy, L. V. K., Amirtham, S. M., Babu, S., Raj, A. N., Sen, D. and Manivasagam, G. Endothelial progenitor/stem cells in engineered vessels for vascular transplantation Journal of Materials Science-Materials in Medicine; 2020, 31 (12): Address: [Muniswami, Durai Murugan; Reddy, L. Vinod Kumar; Raj, Arunai Nambi; Sen, Dwaipayan; Manivasagam, Geetha] VIT, Ctr Biomat Cellular & Mol Theranost CBCMT, Vellore, Tamil Nadu, India. [Muniswami, Durai Murugan] Karpagam Acad Higher Educ Deemed Univ, Dept Microbiol, Coimbatore 641021, Tamil Nadu, India. [Amirtham, Soosai Manickam] Christian Med Coll & Hosp, Dept Physiol, Vellore 632002, Tamil Nadu, India. [Babu, Sandhya] Sandhya Hosp, Vellore 632009, Tamil Nadu, India. Muniswami, DM (corresponding author), VIT, Ctr Biomat Cellular & Mol Theranost CBCMT, Vellore, Tamil Nadu, India. durai.morgan@gmail.com</p> <p>Background: Dysfunction of blood vessel leads to aneurysms, myocardial infarction and other thrombosis conditions. Current treatment strategies are transplantation of blood vessels from one part of the body to other dysfunction area, or allogenic, synthetic. Due to shortage of the donor, painful dissection, and lack of efficacy in synthetic, there is a need for alternative to native blood vessels for transplantation. Methods: Human umbilical-cord tissue obtained from the hospital with the informed consent. Umbilical-cord blood vessels were isolated for decellularization and to establish endothelial cell culture. Cultured cells were characterized by immunophenotype, gene expression and in vitro angiogenesis assay. Decellularized blood vessels were recellularized with the endothelial progenitors and Wharton jelly, CL MSCs (1:1), which was characterized by MTT, biomechanical testing, DNA content, SEM and histologically. Bioengineered vessels were transplanted into the animal models to evaluate their effect. Results: Cultured cells</p>	INT	JUL TO DEC	Physiology	WOS:000595895100002

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	express CD31 and CD14 determining endothelial progenitor cells (EPCs). EPCs expresses various factors such as angiopoitin1, VWF, RANTES, VEGF, BDNF, FGF1, FGF2, HGF, IGF, GDNF, NGF, PLGF, NT3, but fail to express NT4, EGF, and CNTF. Pro and anti-inflammatory cytokine expressions were noticed. Functionally, these EPCs elicit in vitro tube formation. Negligible DNA content and intact ECM confirms the efficient decellularization of tissue. The increased MTT activity in recellularized tissue determines proliferating cells and biocompatibility of the scaffolds. Moreover, significant (P<0.05) increase in maximum force and tensile of recellularized biomaterial as compared to the decellularized scaffolds. Integration of graft with host tissue, suggesting biocompatible therapeutic biomaterial with cells. Conclusion: EPCs with stem cells in engineered blood vessels could be therapeutically applicable in vascular surgery.				
418.	<p>Murhekar, M., Verma, S., Singh, K., Bavdekar, A., Benakappa, N., Santhanam, S., Sapkal, G., Viswanathan, R., Singh, M. P., Nag, V. L., Naik, S., Ashok, M., Abraham, A. M., Shanmugasundaram, D., Sabarinathan, R., Verghese, V. P., George, S., Sachdeva, R. K., Kolekar, J., Manasa, S., Ram, J., Gupta, M., Rohit, M. K., Kumar, P., Gupta, P. C., Ratho, R. K., Munjal, S. K., Nehra, U., Khera, D., Gupta, N., Kaushal, N., Singh, P., Gadepalli, R., Vaid, N., Kadam, S., Shah, S. J., Mahantesh, S., Gowda, V. K., Haldar, P., Aggarwal, M. K. and Gupta, N.</p> <p>Epidemiology of Congenital Rubella Syndrome (CRS) in India, 2016-18, based on data from sentinel surveillance Plos Neglected Tropical Diseases; 2020, 14 (2): 11</p> <p>Address: [Murhekar, Manoj; Shanmugasundaram, Devika; Sabarinathan, R.] ICMR Natl Inst Epidemiol, Chennai, Tamil Nadu, India. [Verma, Sanjay; Singh, Mini P.; Sachdeva, Ravinder Kaur; Ram, Jagat; Gupta, Madhu; Rohit, Manoj K.; Kumar, Praveen; Gupta, Parul Chawla; Ratho, R. K.; Munjal, Sanjay Kumar; Nehra, Urvashi] Postgrad Inst Med Educ & Res, Chandigarh, India. [Singh, Kuldeep; Nag, Vijaya Lakshmi; Khera, Daisy; Gupta, Neeraj; Kaushal, Nidhi; Singh, Pratibha; Gadepalli, Ravisekhar] All India Inst Med Sci, Jodhpur, Rajasthan, India. [Bavdekar, Ashish; Naik, Sadanand; Kolekar, Jyoti; Vaid, Neelam; Kadam, Sandeep; Shah, Sanjay] KEM Hosp, Pune, Maharashtra, India. [Benakappa, Naveen; Manasa, S.; Mahantesh, S.; Gowda, Vykuntaraju K.] Indira Gandhi Inst Child Hlth, Bengaluru, India. [Santhanam, Sridhar; Abraham, Asha Mary; Verghese, Valsan Philip] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Sapkal, Gajanan; Viswanathan, Rajlakshmi; George, Sujji] ICMR Natl Inst Virol, Pune, Maharashtra, India. [Ashok, Munivenkatappa] ICMR Natl Inst Virol, Bangalore Unit, Bengaluru, India. [Haldar, Pradeep; Aggarwal, M. K.] Govt India, Minist Hlth & Family Welf, New Delhi, India. [Gupta, Nivedita] Indian Council Med Res, New Delhi, India. Murhekar, M (reprint author), ICMR Natl Inst Epidemiol, Chennai, Tamil Nadu, India. mmurhekar@nieicmr.org.in</p> <p>Author summary Rubella infection during the first trimester of pregnancy can</p>	INT	JAN TO JUN	Neonatology, Clinical Virology, Pediatrics	<p>WOS:000519231700035 SCOPUS H-INDEX:121 IF: 4.487 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>affect the fetus, resulting in spontaneous abortion, stillbirth or an infant born with a combination of birth defects known as congenital rubella syndrome (CRS). Government of India is committed to eliminate measles and control rubella/CRS and has completed nationwide immunization campaigns using measles-rubella vaccine targeting children aged 9 months to 14 years. A case-based surveillance for CRS is one of the strategies for achieving elimination. The Indian Council of Medical Research and the Ministry of Health and Family Welfare initiated surveillance for CRS in five sentinel sites to estimate the disease burden. During 2016-18, the surveillance sites enrolled 645 suspected CRS patients, 137 (21.2%) were classified as laboratory confirmed CRS and 8 (1.2%) as congenital rubella infection. Common clinical features among laboratory confirmed CRS patients included structural heart defects (78.8%), one or more eye signs (cataract, glaucoma, pigmentary retinopathy (59.9%)) and hearing impairment (38.6%). Thirty-three (24.1%) laboratory confirmed CRS patients died over a period of 2 years. The surveillance data indicated significance of rubella as persistent public health problem in India. Background Government of India is committed to eliminate measles and control rubella/congenital rubella syndrome (CRS) by 2020. In 2016, CRS surveillance was established in five sentinel sites. We analyzed surveillance data to describe the epidemiology of CRS in India. Methodology/Principal findings We used case definitions adapted from the WHO-recommended standards for CRS surveillance. Suspected patients underwent complete clinical examination including cardiovascular system, ophthalmic examination and assessment for hearing impairment. Sera were tested for presence of IgM and IgG antibodies against rubella. Of the 645 suspected CRS patients enrolled during two years, 137 (21.2%) were classified as laboratory confirmed CRS and 8 (1.2%) as congenital rubella infection. The median age of laboratory confirmed CRS infants was 3 months. Common clinical features among laboratory confirmed CRS patients included structural heart defects in 108 (78.8%), one or more eye signs (cataract, glaucoma, pigmentary retinopathy) in 82 (59.9%) and hearing impairment in 51. (38.6%) Thirty-three (24.1%) laboratory confirmed CRS patients died over a period of 2 years. Surveillance met the quality indicators in terms of adequacy of investigation, adequacy of sample collection for serological diagnosis as well as virological confirmation.</p>				
419.	<p>Muthuirulandi Sethuvel, D. P., Devanga Ragupathi, N. K., Ninan, M. M., Michael, J. S., Anandan, S. and Veeraraghavan, B. Differential gene expression profile of Shigella dysenteriae causing bacteremia in an immunocompromised individual Future Sci OA; 2020, 6 (4): Fso456</p> <p>Address: Department of Clinical Microbiology, Christian Medical College, Vellore 632004, India.</p> <p>AIM: Shigella species has varying levels of virulence gene expression with respect</p>	INT	JAN TO JUN	Clinical Microbiology	<p>PMID:32257369 PMC ID: PMC7117556 SCOPUS H-INDEX:17 IF: 3.250 RESURCHIFY (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	to different sites of infection. In this study, the differential gene expression of <i>S. dysenteriae</i> in response to its site of infection was analyzed by transcriptomics. METHODS: This study includes four clinical <i>Shigella</i> isolates. Transcriptomics was done for the stool and blood samples of a single patient. Isolates were screened for the presence of antimicrobial resistance genes. RESULTS: The majority of genes involved in invasion were highly expressed in the strain isolated from the primary site of infection. Additionally, antimicrobial resistance (<i>dhfr1A</i> , <i>sulII</i> , <i>bla (OXA)</i> , <i>bla (CTX-M-1)</i> and <i>qnrS</i>) genes were identified. CONCLUSION: This study provides a concise view of the transcriptional expression of clinical strains and provides a basis for future functional studies on <i>Shigella</i> spp.				
420.	Muthusamy, K. and Sahu, J. K. Specific Learning Disability in India: Challenges and Opportunities Indian Journal of Pediatrics; 2020, 87 (2): 91-92 Address: [Muthusamy, Karthik] Christian Med Coll & Hosp , Dept Neurol Sci, Pediat Neurol Unit, Vellore , Tamil Nadu, India. [Sahu, Jitendra Kumar] Postgrad Inst Med Educ & Res, Dept Pediat, Pediat Neurol Unit, Chandigarh 160012, India. Sahu, JK (reprint author), Postgrad Inst Med Educ & Res, Dept Pediat, Pediat Neurol Unit, Chandigarh 160012, India. jsh2003@gmail.com	NAT	JAN TO JUN	Neurological Sciences, Pediatric Neurology	WOS:000512015800001 SCOPUS H-INDEX:46 IF: 1.136 BIOXBIO (2018/2019)
421.	Nagasubramanian, S. Open versus robotic radical cystectomy: Results from the 3-year follow-up of the RAZOR trial Indian J Urol; 2020, 36 (3): 225-226 Address: Department of Urology, Christian Medical College, Vellore , Tamil Nadu, India.	NAT	JUL TO DEC	Urology	PMID: 33082642 PMC:7531386
422.	Nagasubramanian, S., George, A. J. P. and Chandrasingh, J. Case of ureterosciatic hernia managed by laparoscopic repair ANZ J Surg; 2020, 90 (12): 2571-2573 Address: [Nagasubramanian, Santhosh; George, Arun J. P.; Chandrasingh, JeyachandraBerry] Christian Med Coll & Hosp , Dept Urol, Vellore , Tamil Nadu, India. Nagasubramanian, S (reprint author), Christian Med Coll & Hosp , Dept Urol, Vellore , Tamil Nadu, India.	INT	JAN TO JUN	Urology	PMID:32353198 WOS:000529618500001 SCOPUS H-INDEX:67 IF: 1.605 BIOXBIO (2018/2019)
423.	Nagasubramanian, S., John, N. T., Antonisamy, B., Mukha, R. P., Berry, C. S. J., Kumar, S., Devasia, A. and Kekre, N. S. Tamsulosin and placebo vs tamsulosin and tadalafil in male lower urinary tract symptoms: a double-blinded, randomised controlled trial Bju International; 2020, 125 (5): 718-724 Address: [Nagasubramanian, Santhosh; John, Nirmal Thampi; Mukha, Rajiv Paul; Berry, Chandra Singh Jeyachandra; Kumar, Santosh; Devasia, Antony; Kekre, Nitin Sudhakar] Christian Med Coll & Hosp , Dept Urol, Vellore 632004, Tamil Nadu, India. [Antonisamy, Belavendra] Christian Med Coll & Hosp , Dept Biostat,	INT	JAN TO JUN	Urology, Biostatistics	PMID:32012409 WOS:000516752100001 SCOPUS H-INDEX:142 IF: 4.524 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Vellore, Tamil Nadu, India. John, NT (reprint author), Christian Med Coll & Hosp, Dept Urol, Vellore 632004, Tamil Nadu, India. nirmaltj@gmail.com</p> <p>Objective To compare the efficacy and safety of tamsulosin vs the combination of tamsulosin and tadalafil in male lower urinary tract symptoms (LUTS). Patients and Methods This was a double-blinded, parallel-arm randomised controlled trial. Men aged >45 years with moderate LUTS and a maximum urinary flow rate (Q(max)) of 5-15 mL/s were included. One arm received 0.4 mg tamsulosin only (Group-A), while the second received 5 mg tadalafil with tamsulosin (Group-B). The primary outcome was the International Prostate Symptom Score (IPSS). Secondary outcomes were IPSS quality of life (QoL) score, five-item version of the International Index of Erectile Function (IIEF-5) score, Q(max), and post-void residual urine (PVR). Block randomisation was used. Placebo was used for blinding and allocation concealment. Intention-to-treat analysis was used for outcome measures. Results Of the 183 men screened, 140 were randomised (71 in Group-A, 69 in Group-B); 116 (82.85%) (61 in Group-A, 55 in Group-B) completed the study. Baseline characteristics were comparable. The improvements in the IPSS, IPSS QoL score, IIEF score and Q(max) were -1.69 (95% confidence interval [CI] -1.4 to -2.0), -0.70 (95% CI -0.60 to -0.80), 3.8 (95% CI 3.4-4.2) and 1.8 mL/s (95% CI 1.1-2.4) respectively, in favour of the combination group. The difference in PVR was not significant. There were no serious adverse events (AEs). The dropout rate due to AEs was 2.85%. Myalgia (five patients) was the commonest AE in the combination group. Conclusion The combination of tamsulosin and tadalafil produced significantly better improvements in LUTS, QoL, erectile function and Q(max) compared to monotherapy with tamsulosin, without an increase in AEs.</p>				
424.	<p>Nagesh, S. and Chakraborty, S. Saving the frontline health workforce amidst the COVID-19 crisis: Challenges and recommendations J Glob Health; 2020, 10 (1): 010345</p> <p>Address: Latika Roy Foundation, Dehradun, Uttarakhand, India. Christian Medical College and Hospital, Ida Scudder Road, Vellore, Tamil Nadu, India. (available upon request from the corresponding author), and declare no conflicts of interest.</p>	INT	JAN TO JUN	Physical Medicine and Rehabilitation	<p>PMID:32373323 PMC ID: PMC7183244 SCOPUS H-INDEX:27 IF: 1.250 RG (2018/2019)</p>
425.	<p>Nagral, A., Sarma, M. S., Matthai, J., Kukkle, P. L., Devarbhavi, H., Sinha, S., Alam, S., Bavdekar, A., Dhiman, R. K., Eapen, C. E., Goyal, V., Mohan, N., Kandadai, R. M., Sathiyasekaran, M., Poddar, U., Sibal, A., Sankaranarayanan, S., Srivastava, A., Thapa, B. R., Wadia, P. M., Yachha, S. K. and Dhawan, A. Corrigendum to "Wilson's Disease: Clinical Practice Guidelines of the Indian National Association for the Study of Liver (INASL), The Indian Society of Pediatric</p>	INT	JAN TO JUN	Gastroenterology	<p>SCOPUS H-INDEX:29 IF: 0.130 RG (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Gastroenterology, Hepatology and Nutrition (ISPGHAN) and the Movement Disorders Society of India (MDSI)" (Journal of Clinical and Experimental Hepatology (2019) 9(1) (74-98), (S0973688318306613), (10.1016/j.jceh.2018.08.009)) Journal of Clinical and Experimental Hepatology; 2020, 10 (1): 99</p> <p>Address: Department of Gastroenterology, Jaslok Hospital and Research Centre, Mumbai, India Department of Gastroenterology, Apollo Hospitals, Navi Mumbai, India Department of Pediatric Gastroenterology, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, India Department of Paediatric Gastroenterology, Masonic Medical Centre for Children, Coimbatore, India Department of Neurology, Apollo Hospitals, Bangalore, India Department of Gastroenterology and Hepatology, St. John's Medical College Hospital, Bangalore, India Department of Neurology, National Institute of Mental Health and Neurosciences, Bangalore, India Department of Pediatric Hepatology, Institute of Liver and Biliary Sciences, New Delhi, India Department of Pediatrics, KEM Hospital, Pune, India Department of Hepatology, Postgraduate Institute of Medical Education and Research, Chandigarh, India Department of Gastroenterology, Christian Medical College, Vellore, India Department of Neurology, All India Institute of Medical Sciences, New Delhi, India Department of Pediatric Gastroenterology, Hepatology & Liver Transplantation, Medanta – The Medicity Hospital, Gurgaon, India Department of Neurology, Nizam's Institute of Medical Sciences, Hyderabad, India Department of Pediatric Gastroenterology, Kanchi Kamakoti Childs Trust Hospital Chennai, India Department of Pediatric Gastroenterology and Hepatology, Indraprastha Apollo Hospitals, New Delhi, India Department of Pediatric Gastroenterology, Apollo Children's Hospital, Chennai, India Department of Gastroenterology & Pediatric Gastroenterology, MM Medical Institute of Medical Sciences and Research, Mullana, Ambala, India Department of Neurology, Jaslok Hospital and Research Centre, Mumbai, India Department of Pediatrics and Pediatric Liver GI and Nutrition Center and Mowat Labs, King's College Hospital, London, United Kingdom</p> <p>The authors regret the following corrections to their article: 1. Under the heading "MODIFIED LEIPZIG SCORE - A NEW SCORING SYSTEM", (a) the sentence beginning "The Leipzig score of 1993..." should be replaced with "The Leipzig score of 2003". 2. The sentence beginning "A recently published multicentric..." should</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	be replaced with "In a recently published multicentric..." in the second paragraph under the heading "Liver Transplantation for Hepatic WD". 3. Reference 20 should read as "Walshe JM, Yealland M. Wilson's disease: the problem of delayed diagnosis. J Neurol Neurosurg Psychiatry. 1992;55(8):692-696". The authors would like to apologise for any inconvenience caused. © 2018 Indian National Association for Study of the Liver				
426.	<p>Naik, D., Jebasingh, F. K., Thomas, N., Raveendran, S., Raj Pallapati, S. C., Prakash, J. J., Gowri, M. and Thomas, B. P.</p> <p>Necrotizing soft tissue infection of the upper extremities in patients with diabetes mellitus in a tertiary care center-a retrospective study</p> <p>Diabetes Metab Syndr; 2020, 14 (5): 1071-1075</p> <p>Address: Department of Endocrinology, Diabetes & Metabolism, Christian Medical College, Vellore, 632004, India.</p> <p>Dr Paul Brand Centre for Hand Surgery, Christian Medical College, Vellore, 632004, India. Electronic Address: drsrekanthr@gmail.com.</p> <p>Dr Paul Brand Centre for Hand Surgery, Christian Medical College, Vellore, 632004, India.</p> <p>Department of Microbiology, Christian Medical College, Vellore, 632004, India.</p> <p>Department of Biostatistics, Christian Medical College, Vellore, 632004, India.</p> <p>BACKGROUND: Necrotizing soft tissue infection (NSTI) of the upper extremities is a rare, but potentially life-threatening infection in patients with type 2 diabetes mellitus (T2DM). We analyzed the clinical characteristics and the outcome of NSTI of upper extremities in these patients. METHODS: This was a retrospective study analyzing the clinical characteristics and the outcomes of 33 T2DM patients with NSTI of upper extremities, who were treated in the department of hand surgery between January 2011 and December 2017. RESULTS: Predisposing factors for NSTI were recognized in 16 (48.5%) patients. Eleven (33.3)% patients had septic shock while ten (30.3%) had acute renal insufficiency at the time of presentation, of which six required dialysis. The mean glycosylated hemoglobin was 9.6(±2.6)% and the random plasma glucose at admission was 271(±96) mg/dl. Monomicrobial infection was seen in 16(49%) patients and polymicrobial infection in 9(27%) patients. Gram-positive causation was found in 25(66%) patients. Twelve (36.4%) patients required amputation, six (18.2%) of which were major. Death occurred in more than one-fifth (21.2%) of the patients during treatment. CONCLUSION: Necrotizing soft tissue infection of the upper extremities in T2DM is associated with increased risk of severe infection, amputation and mortality.</p>	INT	JUL TO DEC	Endocrinology, Diabetes & Metabolism, Hand Surgery, Microbiology, Biostatistics	PMID: 32650278
427.	<p>Naina, P., Jonathan, G. E., Prabhakar, M., Irodi, A., Syed, K. A., John, M. and Varghese, A. M.</p> <p>Pediatric nasal dermoid- a decade's experience from a South Indian tertiary care centre</p> <p>Int J Pediatr Otorhinolaryngol; 2020, 139 110418</p> <p>Address: Department of ENT , Christian Medical College, Vellore, Tamil Nadu, India. Electronic Address: drp.naina@hotmail.com.</p>	INT	JUL TO DEC	ENT, Neurosurgery , Radiology	PMID: 33035807

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Department of Neurosurgery , Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Department of ENT , Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Department of Radiology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>INTRODUCTION: Nasal dermoid sinus cyst (NDSC) are uncommon congenital lesions in children. OBJECTIVE: To review the clinical and radiological presentation and study the surgical outcomes of this uncommon lesion. METHOD: Retrospective chart review of all children diagnosed with nasal dermoid from 2010 to 2020 at a tertiary referral hospital in South India was executed. The medical records were reviewed for demographics, lesion characteristics, imaging, operative details, and outcomes and literature review was performed. RESULT: A total of 25 children [Mean age 3.7 yrs (Range 2-9 yrs)] with nasal dermoid sinus cysts were treated in the last decade. While 13 presented with a sinus, 11 presented with cyst and 1 had both. The lesions mainly involved the upper third of the nose in 10 children, middle one third in 6 and upper one third in 9 children. All underwent Magnetic Resonance Imaging, in 11 Computed Tomography also was done. A flow chart of the lesion characteristics and its management has been presented. Intraoperatively intracranial extension was present in four children. The approach to intracranial extension and corresponding literature review has been presented. Follow up ranged from one to six years. (Median 3.5 yrs) and no recurrence or complication was noted. CONCLUSION: Nasal dermoid is an uncommon congenital anomaly. Preoperative evaluation must include imaging to assess extent and rule out intracranial extension. Surgical strategy depends on whether presentation is as sinus or cyst and location and extent of lesion. All surgical approaches have a good surgical and cosmetic outcome.</p>				
428.	<p>Naina, P., Syed, K. A., Irodi, A., John, M. and Varghese, A. M.</p> <p>Pediatric tracheal dimensions on computed tomography and its correlation with tracheostomy tube sizes</p> <p>Laryngoscope; 2020, 130 (5): 1316-1321</p> <p>Address: [Naina, P.; Syed, Kamran Asif; John, Mary; Varghese, Ajoy Mathew] Christian Med Coll & Hosp, Dept ENT, Vellore 632004, Tamil Nadu, India. [Irodi, Aparna] Christian Med Coll & Hosp, Dept Radiol, Vellore, Tamil Nadu, India.</p> <p>Naina, P (reprint author), Christian Med Coll & Hosp, Dept ENT, Vellore 632004, Tamil Nadu, India. drp.naina@hotmail.com</p> <p>Objective: Age-based formulas for selecting the appropriate size of tracheostomy tubes in children are based on data on tracheal dimensions. This study aims to measure the tracheal dimensions of Indian children by computerized tomography (CT) and to compare this with the dimensions of age-appropriate tracheostomy tubes. Methods: CT scans of children aged less than 16 years that were taken for indications other than respiratory distress were included. Tracheal diameters at the tracheostomy point and tracheal length from the tracheostomy point to the</p>	INT	JAN TO JUN	ENT, Radiology	<p>WOS:000528051200057</p> <p>SCOPUS</p> <p>H-INDEX:142</p> <p>IF: 2.343 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	carina were calculated from the scans. These dimensions were correlated with age, weight, and height. The measurement on the CT scan was used to predict the appropriate size of tracheostomy tube, which was compared with the tracheostomy tube sizes. Results: Two hundred and fourteen CT scans of children aged below 16 years were included in the study. On multiple logistic regression analysis, tracheal diameter correlated well with age and weight (P = 0.04 and 0.001, respectively), whereas tracheal length correlated well with age and height of the child (P = 0.03 and 0 < 0.001, respectively). On comparison with dimensions of the tracheostomy tube, tracheal diameter correlated well, and the length was found to be longer than needed to prevent endobronchial intubation. The regression value was used to predict the size of an ideal tracheostomy tube. Conclusion: Tracheal diameter of Indian children correlates well with the outer diameter of age-appropriate tracheostomy tubes, but the length of these tubes is longer than the ideal length. This would necessitate a change in the design of these tubes. Level of Evidence: 2b. Laryngoscope, 130:1316-1321, 2020. © 2019 The American Laryngological, Rhinological and Otological Society, Inc				
429.	Naina, P., Trupthi, M. C., Thomas, N. and Varghese, A. M. Otolaryngologist's Encounter With Oncogenic Osteomalacia Ear Nose Throat J; 2020, 145561320936027 Address: Department of ENT, CMC, Vellore , Tamil Nadu, India. Department of Endocrinology, CMC, Vellore , Tamil Nadu, India.	INT	JUL TO DEC	ENT, Endocrinology	PMID: 32659121
430.	Nair, A. A., Christopher, D. J., Moidu, F. and Chandran, D. Superior vena caval obstruction: a rare presentation of Behcet's disease BMJ case reports; 2020, 13 (12): Address: Respiratory Medicine, Christian Medical College and Hospital, Vellore , Tamil Nadu, India avinash444@hotmail.com. Pulmonary Medicine, Christian Medical College and Hospital, Vellore , Tamil Nadu, India. Radiology, Christian Medical College and Hospital, Vellore , Tamil Nadu, India. A 25-year-old Indian man presented with low-grade fever followed by gradually increasing swelling of neck and face. Physical examination showed bilateral neck swelling, facial swelling and dilated veins in the upper chest. Superior vena cava (SVC) obstruction due to an underlying malignancy was suspected. CT thorax showed large saccular aneurysm with thrombosis of bilateral subclavian arteries of which the right one caused external compression of right innominate vein draining into the SVC. A history of recurrent oral and scrotal ulcers was obtained following which skin pathergy test was done, which was suggestive of a diagnosis of Behcet's disease (BD). He responded to treatment with steroids and azathioprine. This report illustrates that rare nonmalignant cause such as BD could also present with SVC obstruction.	INT	JUL TO DEC	Respiratory Medicine, Pulmonary Medicine, Radiology	PMID: 33334747 PMC:7747549
431.	Nair, A. V., Mani, A., Vijayaraghavan, A., Alexander, P., Shaikh, A., Ninan, R., Prabhakar, A. T., Sivadasan, A., Aaron, S., Jude, J., Mathew, V. and Alexander, M. Utility of stimulus induced after discharges in the evaluation of peripheral nerve	INT	JUL TO DEC	Neurology, Clinical Microbiology	PMID: 33179828

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>hyperexcitability: Old wine in a new bottle? J Peripher Nerv Syst; 2020, Address: Department of Neurology, Christian Medical College, Vellore, India. Department of Clinical Microbiology, Christian Medical College, Vellore, India. Limited literature is available on stimulus induced after discharges (SIAD) in patients with peripheral nerve hyperexcitability (PNH). The aim of the study was to examine the diagnostic utility of SIAD in the diagnosis and monitoring of primary PNH disorders. In this retrospective study, we studied 26 patients who were admitted with a diagnosis of primary PNH to the department of Neurology from January 2013 to April 2019. Their clinical profile, immunological characteristics were extracted from the database and nerve conduction studies were relooked for the presence of SIAD. 76% of patients in the primary PNH cohort had SIAD with 90% of them being voltage-gated potassium channel complex antibody positive; predominantly against contactin-associated protein-2 antigen and rest being paraneoplastic. There was also resolution of SIAD following treatment indicating reversible hyperexcitability. SIAD is a sensitive marker for Primary PNH syndrome with monitoring and diagnostic implications.</p>				
432.	<p>Nair, A. V., Prabhakar, A. T., Iqbal, S. A., Sivadasan, A. and Mathew, V. Postural Sway and Bobblehead Movement: Unique Presentation of Bilateral Tendo-Achilles Rupture Neurol India; 2020, 68 (6): 1445-1446 Address: Department of Neurology, Christian Medical College, Vellore, Tamil Nadu, India. The human body requires equilibrium to assume the vertical posture and balance for walking which is maintained by righting reflexes and supporting reactions, respectively. Postural movements around the ankle is responsible for maintaining forward and backward leaning in an upright posture. We report a case of postural sway and bobblehead movement following bilateral tendo-Achilles rupture.</p>	NAT	JUL TO DEC	Neurology	PMID: 33342887
433.	<p>Nair, A. V., Vijayaraghavan, A., Alexander, P. T., Mani, A. M., Giridhar, D. and Mathew, V. More than It Meets the Eye! Vision Loss as a Presenting Symptom of von Hippel-Lindau Disease J Pediatr Neurosci; 2020, 15 (3): 314-316 Address: Department of Neurological Sciences, Christian Medical College Vellore, Vellore, Tamil Nadu, India. Department of Ophthalmology, Christian Medical College Vellore, Vellore, Tamil Nadu, India. Optic neuritis has many mimics. Careful history and fundus examination are paramount in making the correct diagnosis. Here we present a case of bilateral vision loss in a 15-year-old male who subsequently developed hypertensive crises. Subsequent evaluation showed pheochromocytoma and genetic screening confirmed Von Hippel-Lindau disease.</p>	NAT	JUL TO DEC	Neurological Ophthalmology Sciences,	PMID:33531956 PMC ID:7847098

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
434.	<p>Nazha, A., Hu, Z. H., Wang, T., Lindsley, R. C., Abdel-Azim, H., Aljurf, M., Bacher, U., Bashey, A., Cahn, J. Y., Cerny, J., Copelan, E., Defilipp, Z., Diaz, M. A., Farhadfar, N., Gadalla, S. M., Gale, R. P., George, B., Gergis, U., Grunwald, M. R., Hamilton, B., Hashmi, S., Hildebrandt, G. C., Inamoto, Y., Kalaycio, M., Kamble, R. T., Kharfan-Dabaja, M. A., Lazarus, H. M., Liesveld, J. L., Litzow, M. R., Majhail, N. S., Murthy, H. S., Nathan, S., Nishihori, T., Pawarode, A., Rizzieri, D., Sabloff, M., Savani, B. N., Schachter, L., Schouten, H. C., Seo, S., Shah, N. N., Solh, M., Valcarcel, D., Vij, R., Warlick, E., Wirk, B., Wood, W. A., Yared, J. A., Alyea, E., Papat, U., Sobecks, R. M., Scott, B. L., Nakamura, R. and Saber, W.</p> <p>A Personalized Prediction Model for Outcomes after Allogeneic Hematopoietic Cell Transplant in Patients with Myelodysplastic Syndromes Biology of Blood and Marrow Transplantation; 2020, 26 (11): 2139-2146 Address: [Nazha, Aziz; Kalaycio, Matt; Sobecks, Ronald M.] Cleveland Clin, Desk R35,9500 Euclid Ave, Cleveland, OH 44195 USA. [Hu, Zhen-Huan; Wang, Tao; Saber, Wael] Med Coll Wisconsin, Dept Med, CIBMTR, Milwaukee, WI 53226 USA. [Wang, Tao] Med Coll Wisconsin, Div Biostat, Inst Hlth & Equ, Milwaukee, WI 53226 USA. [Lindsley, R. Coleman] Dana Farber Canc Inst, Boston, MA 02115 USA. [Abdel-Azim, Hisham] Univ Southern Calif, Div Hematol Oncol & Blood & Marrow Transplantat, Childrens Hosp Los Angeles, Keck Sch Med, Los Angeles, CA 90007 USA. [Aljurf, Mahmoud; Hashmi, Shahrukh] King Faisal Specialist Hosp & Res Ctr, Dept Oncol, Riyadh, Saudi Arabia. [Bacher, Ulrike] Univ Bern, Bern Univ Hosp, Dept Hematol, Inselspital, Bern, Switzerland. [Bashey, Asad] Northside Hosp, Blood & Marrow Transplant Program, Atlanta, GA USA. [Cahn, Jean-Yves] CHU Grenoble Alpes, Dept Hematol, Grenoble, France. [Cerny, Jan] Univ Massachusetts, Med Ctr, Dept Med, Div Hematol Oncol, Worcester, MA USA. [Copelan, Edward; Grunwald, Michael R.] Atrium Hlth, Levine Canc Inst, Dept Hematol Oncol & Blood Disorders, Charlotte, NC USA. [DeFilipp, Zachariah] Massachusetts Gen Hosp, Blood & Marrow Transplantat Program, Boston, MA 02114 USA. [Diaz, Miguel Angel] Hosp Infantil Univ Nino Jesus, Dept Hematol Oncol, Madrid, Spain. [Farhadfar, Noshah] Univ Florida, Coll Med, Div Hematol Oncol, Gainesville, FL USA. [Gadalla, Shahinaz M.] NCI, Div Canc Epidemiol & Genet, NIH, Clin Genet Branch, Rockville, MD USA. [Gale, Robert Peter] Imperial Coll London, Div Expt Med, Dept Med, Hematol Res Ctr, London, England. [George, Biju] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Gergis, Usama] New York Presbyterian Hosp, Weill Cornell Med Ctr, Dept Med Oncol, Hematol Malignancies & Bone Marrow Transplant, New York, NY USA. [Hamilton, Betty; Majhail, Navneet S.] Cleveland Clin, Taussig Canc Inst, Blood & Marrow Transplant Program, Cleveland, OH 44106 USA. [Hashmi, Shahrukh] Mayo Clin, Dept Internal Med, Rochester, MN USA. [Hildebrandt, Gerhard C.] Univ Kentucky, Markey Canc Ctr, Lexington, KY USA. [Inamoto, Yoshihiro] Natl Canc Ctr, Div Hematopoiet Stem Cell Transplantat, Tokyo, Japan. [Kamble, Rammurti T.] Baylor Coll Med, Ctr Cell & Gene Therapy, Div Hematol & Oncol, Houston, TX 77030 USA. [Kharfan-Dabaja, Mohamed A.; Murthy, Hemant S.] Mayo Clin, Blood & Marrow Transplantat Program, Div Hematol Oncol, Jacksonville, FL 32224 USA. [Lazarus, Hillard M.] Case Western Reserve Univ, Cleveland, OH 44106 USA.</p>	INT	JUL TO DEC	Clinical Hematology	WOS:000583866400030

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>[Liesveld, Jane L.] Univ Rochester, Med Ctr, Dept Med, Rochester, NY 14642 USA. [Litzow, Mark R.] Mayo Clin, Div Hematol, Rochester, MN USA. [Litzow, Mark R.] Mayo Clin, Transplant Ctr, Rochester, MN USA. [Nathan, Sunita] Rush Univ, Med Ctr, Chicago, IL USA. [Nishihori, Taiga] H Lee Moffitt Canc Ctr & Res Inst, Dept Blood & Marrow Transplant & Cellular Immunot, Tampa, FL USA. [Pawarode, Attaphol] Univ Michigan, Sch Med, Dept Internal Med, Blood & Marrow Transplantat Program, Div Hematol O, Ann Arbor, MI USA. [Rizzieri, David] Duke Univ, Div Hematol Malignancies & Cellular Therapy, Durham, NC USA. [Sabloff, Mitchell] Univ Ottawa, Dept Med, Div Hematol, Ottawa, ON, Canada. [Sabloff, Mitchell] Ottawa Hosp Res Inst, Ottawa, ON, Canada. [Savani, Bipin N.] Vanderbilt Univ, Med Ctr, Dept Med, Div Hematol Oncol, Nashville, TN USA.</p> <p>Nazha, A (corresponding author), Cleveland Clin, Desk R35,9500 Euclid Ave, Cleveland, OH 44195 USA. nazhaa@ccf.org</p> <p>Allogeneic hematopoietic stem cell transplantation (HCT) remains the only potentially curative option for myelodysplastic syndromes (MDS). Mortality after HCT is high, with deaths related to relapse or transplant-related complications. Thus, identifying patients who may or may not benefit from HCT is clinically important. We identified 1514 patients with MDS enrolled in the Center for International Blood and Marrow Transplant Research Registry and had their peripheral blood samples sequenced for the presence of 129 commonly mutated genes in myeloid malignancies. A random survival forest algorithm was used to build the model, and the accuracy of the proposed model was assessed by concordance index. The median age of the entire cohort was 59 years. The most commonly mutated genes were ASXL1(20%), TP53 (19%), DNMT3A (15%), and TET2 (12%). The algorithm identified the following variables prior to HCT that impacted overall survival: age, TP53 mutations, absolute neutrophils count, cytogenetics per International Prognostic Scoring System-Revised, Karnofsky performance status, conditioning regimen, donor age, WBC count, hemoglobin, diagnosis of therapy-related MDS, peripheral blast percentage, mutations in RAS pathway, JAK2 mutation, number of mutations/sample, ZRSR2, and CUX1 mutations. Different variables impacted the risk of relapse post-transplant. The new model can provide survival probability at different time points that are specific (personalized) for a given patient based on the clinical and mutational variables that are listed above. The outcomes' probability at different time points may aid physicians and patients in their decision regarding HCT. (C) 2020 American Society for Transplantation and Cellular Therapy. Published by Elsevier Inc. All rights reserved.</p>				
435.	<p>Nekkanti, A. C., Hazra, D., George, R. M., Yalamanchili, S., Kumari, P., Samuel, S. T. and Abhilash, K. P. P.</p> <p>Pregnancy-related emergencies: Profile and outcome J Family Med Prim Care; 2020, 9 (9): 4618-4622</p> <p>Address: Department of Emergency Medicine, Christian Medical College,</p>	NAT	JUL TO DEC	Emergency Medicine, Internship Student, Obstetrics and Gynaecology	PMID: 33209772 PMC:7652139

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Vellore, Tamil Nadu, India. Internship Student, Christian Medical College, Vellore, Tamil Nadu, India. Obstetrics and Gynaecology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND: National efforts to reduce maternal mortality with respect to community services have primarily focused on upgrading transportation infrastructure and formalizing training for care providers. There is, however, a paucity of baseline data on the profile and outcomes of pregnant women presenting to the Emergency Department (ED) in India. METHODS: This retrospective study enrolled all pregnant women presenting to a large tertiary medical care center in India, between November 2016 and November 2017. RESULTS: There were 696 ED visits by pregnant women during the study period. The mean age was 26.85 (SD: 4.88) years. Pregnant women in the first trimester contributed to 50.8% of all visits, and 54% being multigravida. The most common presenting complaints were bleeding/spotting per vaginum (PV) (38.2%) and abdominal pain (37.6%) followed by fever (21.6%) and vomiting (21.5%). Obstetric causes contributed to 53.2% of the ED visits, while nonobstetric causes amounted to 43.2%. Over a third (39.7%) required hospital admission. Of these patients, 73% delivered in CMC with live births amounting to 62.3% while 3.5% ended in fetal deaths. The miscarriages rate was as high as 28%. More than half (51.1%) of the deliveries were by normal vaginal delivery. There were no maternal deaths during the time of admission. CONCLUSIONS: Our study sheds new light on the profile of emergency visits among pregnant patients and their relationship to the outcome of pregnancy. First trimester visits were most common with complaints of bleeding PV and abdominal pain. This could explain the high rate of miscarriages among this population.</p>				
436.	<p>Nesaraj, J., Varghese, V. D., Boopalan, P. R., Nithyananth, M., Sudarsanam, T. D. and Jepegnanam, T. S. Intravenous Mannitol reduces intracompartmental pressure following tibia fractures: A randomized controlled trial Chin J Traumatol; 2020, Address: Christian Medical College, Vellore 632004, Tamil Nadu, India. Royal Darwin Hospital, Darwin 0810, Northern Territory, Australia. Christian Medical College, Vellore 632004, Tamil Nadu, India. Electronic Address: jepegnanamt@cmcvellore.ac.in.</p> <p>PURPOSE: Impending compartment syndrome is a common event following closed tibia fractures, which can progress to sinister compartment syndrome. Fasciotomy is the only definitive treatment available, though it has its own defects and complications. Medical management at present consists of limb elevation and adequate hydration. This study aims at determining whether intravenous administration of Mannitol reduced the intracompartmental pressure in patients with closed tibial fractures. METHODS: This is a double blinded, randomized control trial done in a single tertiary care center in India. Forty-five patients were recruited between February 2012 and October 2012. Forty patients who presented</p>	INT	JUL TO DEC	Orthopaedics, Medicine	PMID: 33288404

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	to the emergency department with isolated, closed, high velocity, and proximal 2/3 tibia fractures were included in this study. Patients with contraindication to Mannitol were excluded. They were allocated into 2 groups by the investigator using computer generated randomization. The pressure in the anterior compartment of the leg was measured with a handheld Stryker pressure monitor. Then either 20% Mannitol or 0.9% normal saline were given intravenously in a blinded manner, based on the randomization. The intracompartmental pressure was measured at 0, 1 and 3 h after the infusion. The participant, investigator and statistician were masked to the group assessment. RESULTS: There was no difference in intracompartmental pressures at 1 or 3 hours, between the groups. However, in patients with the baseline of compartmental pressures ≥ 30 mmHg, Mannitol showed a marked reduction in pressure of 8.5 mmHg at 1 h compared to almost no change in pressure in the saline group. There were no adverse events with the use of Mannitol. CONCLUSIONS: This preliminary study appears to show that Mannitol is useful in the management of the increased compartment pressure. The limitations of this study were that it only involved a small group of patients and the baseline pressures in both the groups were not comparable. More studies are required before the use of Mannitol as a standard of care in the management of compartment syndrome can be established.				
437.	<p>Nicoletti, P., Devarbhavi, H., Goel, A., Venkatesan, R., Eapen, C. E., Grove, J. I., Zafer, S., Bjornsson, E., Lucena, M. I., Andrade, R. J., Pirmohamed, M., Wadelius, M., Larrey, D., Maitland-Van Der Zee, A. H., Ibanez, L., Watkins, P. B., Daly, A. K. and Aithal, G. P. Genetic Risk Factors in Drug-Induced Liver Injury Due to Isoniazid-Containing Antituberculosis Drug Regimens Clinical Pharmacology & Therapeutics;</p> <p>Address: [Nicoletti, Paola; Zafer, Samreen] Icahn Sch Med Mt Sinai, Dept Genet & Genom Sci, New York, NY 10029 USA. [Devarbhavi, Harshad] St Johns Med Coll Hosp, Dept Gastroenterol, Bangalore, Karnataka, India. [Goel, Ashish; Eapen, Chundamannil E.] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Venkatesan, Radha] Madras Diabet Res Fdn, Dept Mol Genet, Chennai, Tamil Nadu, India. [Grove, Jane, I; Aithal, Guruprasad P.] Univ Nottingham, Nottingham Univ Hosp NHS Trust, NIHR Nottingham Biomed Res Ctr, Nottingham, England. [Grove, Jane, I; Aithal, Guruprasad P.] Univ Nottingham, Nottingham Digest Dis Ctr, Sch Med, Nottingham, England. [Bjornsson, Einar] Natl Univ Hosp Iceland, Dept Internal Med, Div Gastroenterol & Hepatol, Reykjavik, Iceland. [Bjornsson, Einar] Univ Iceland, Fac Med, Reykjavik, Iceland. [Lucena, M. Isabel; Andrade, Raul J.] Univ Malaga, Hosp Univ Virgen Victoria, Inst Invest Biomed Malaga IBIMA, UGC Digest & Serv Farmacol Clin, Malaga, Spain. [Lucena, M. Isabel; Andrade, Raul J.] Ctr Invest Biomed Red Enfermedades Hepat & Digest, Madrid, Spain. [Pirmohamed, Munir] Univ Liverpool, Liverpool Univ Hosp & Liverpool Hlth Partners, Dept Pharmacol & Therapeut, Liverpool, Merseyside, England. [Wadelius, Mia] Uppsala Univ, Dept Med Sci & Sci Life Lab, Uppsala, Sweden. [Larrey, Dominique] CHU St Eloi Hosp,</p>	INT	JUL TO DEC	Clinical Gastroenterology	WOS:000595733400001

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Liver Unit, Montpellier, France. [Maitland-van der Zee, Anke-Hilse] Univ Amsterdam, Acad Med Ctr AMC, Dept Resp Med, Amsterdam, Netherlands. [Maitland-van der Zee, Anke-Hilse] Univ Utrecht, Dept Pharmaceut Sci, Div Pharmacoepidemiol & Clin Pharmacol, Utrecht, Netherlands. [Ibanez, Luisa] Univ Autonoma Barcelona, Hosp Univ Vall dHebron, Fundacio Inst Catala Farmacol, Barcelona, Spain. [Watkins, Paul B.] Univ N Carolina, Eshelman Sch Pharm, Inst Drug Safety Sci, Chapel Hill, NC 27515 USA. [Daly, Ann K.] Newcastle Univ, Translat & Clin Res Inst, Newcastle Upon Tyne, Tyne & Wear, England.</p> <p>Aithal, GP (corresponding author), Univ Nottingham, Nottingham Univ Hosp NHS Trust, NIHR Nottingham Biomed Res Ctr, Nottingham, England.; Aithal, GP (corresponding author), Univ Nottingham, Nottingham Digest Dis Ctr, Sch Med, Nottingham, England. Guru.Aithal@nottingham.ac.uk</p> <p>Drug-induced liver injury (DILI) is a complication of treatment with antituberculosis (TB) drugs, especially in isoniazid (INH)-containing regimens. To investigate genetic risk factors, we performed a genomewide association study (GWAS) involving anti-TB DILI cases (55 Indian and 70 European) and controls (1,199 Indian and 10,397 European). Most cases were treated with a standard anti-TB drug regimen; all received INH. We imputed single nucleotide polymorphism and HLA genotypes and performed trans-ethnic meta-analysis on GWAS and candidate gene genotypes. GWAS found one significant association (rs117491755) in Europeans only. For HLA, HLA-B*52:01 was significant (meta-analysis odds ratio (OR) 2.67, 95% confidence interval (CI) 1.63-4.37, P = 9.4 x 10⁻⁵). For N-acetyltransferase 2 (NAT2), NAT2*5 frequency was lower in cases (OR 0.69, 95% CI 0.57-0.83, P = 0.01). NAT2*6 and NAT2*7 were more common, with homozygotes for NAT2*6 and/or NAT2*7 enriched among cases (OR 1.89, 95% CI 0.84-4.22, P = 0.004). We conclude HLA genotype makes a small contribution to TB drug-related DILI and that the NAT2 contribution is complex, but consistent with previous reports when differences in the metabolic effect of NAT2*5 compared with those of NAT2*6 and NAT2*7 are considered.</p>				
438.	<p>Ninan, G. A., Gunasekaran, K., Jayakaran, J. A. J., Johnson, J., Abhilash, K., Pichamuthu, K. and Iyadurai, R.</p> <p>Heat-related illness-Clinical profile and predictors of outcome from a healthcare center in South India</p> <p>J Family Med Prim Care; 2020, 9 (8): 4210-4215</p> <p>Address: Department of General Medicine Unit V, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Department of Emergency Medicine, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Division of Critical Care, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND: Heat-related illness is a common medical emergency. There is failure of thermoregulatory mechanisms of the body resulting in multiple organ dysfunction syndrome which if not identified and treated urgently can result in</p>	NAT	JUL TO DEC	General Medicine Unit V, Emergency Medicine, Division of Critical Care	PMID: 33110834 PMC:7586615

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	high mortality rate and permanent neurological damage. This study provides description of clinical profile patients presenting with heat-related illness and identifies clinical and laboratory variables resulting in poor outcome. METHODS: This retrospective study was done identifying adult patients admitted with a diagnosis of heat-related illness from April to August 2019 in tertiary care center. Their clinical profile, laboratory investigations and outcome were extracted from medical records and variables associated with poor outcome were analyzed for statistical significance. RESULTS: Mean age of the patients in the study was 61 years with mean heat index of the localities being 39.6-degree C. 66% of patients had multiple organ dysfunction with central nervous system dysfunction (77%) followed by respiratory distress syndrome (61%) as the most common organ derangement. Evaporative cooling measures were incorporated in management of all patients, followed by cold saline infusion in 60%. Higher J-ERATO score at admission was found to be a predictor for underlying multiple organ dysfunction syndrome (P value < 0.029). The mortality rate associated with heat-related illness in this study was 11.1%. CONCLUSIONS: Multiple organ dysfunction is seen in majority of the patients and calculation of simple admission J-ERATO score helps in predicting the same. Declining mortality rate observed in our study as compared to the earlier studies could be attributed to increased awareness, prompt diagnosis and initiation of rapid cooling measures.				
439.	Ninan, M. M., Sahni, R. D., Chacko, B., Balaji, V. and Michael, J. S. Candida auris: Clinical profile, diagnostic challenge and susceptibility pattern: Experience from a tertiary-care centre in South India J Glob Antimicrob Resist; 2020, 21 181-185 Address: Department of Microbiology, CMC Vellore, Vellore , Tamil Nadu, India. Electronic Address: marilyn@cmcvellore.ac.in. Department of Microbiology, CMC Vellore, Vellore , Tamil Nadu, India. Department of Critical Care, CMC Vellore, Vellore , Tamil Nadu, India. OBJECTIVES: Candida auris is an emerging, multidrug-resistant yeast transmitted in healthcare settings. Conventional methods of speciation are unable to identify C. auris to species level. Three methods, namely VITEK® MS v.3.0, VITEK®2 and target sequencing of the internal transcribed spacer (ITS) region and 28S rRNA gene, were evaluated. Antifungal susceptibility testing (AFST) was also performed, and risk factors for acquisition of C. auris candidaemia were studied. METHODS: Between November 2016 and November 2017, 203 Candida spp. were isolated from blood cultures, of which 11 isolates that were unidentifiable by conventional methods were further tested by VITEK® MS v.3.0 and VITEK®2 and were confirmed by sequencing. AFST was carried out on all 11 isolates by broth microdilution according to Clinical and Laboratory Standards Institute (CLSI) guidelines. Clinical and epidemiological data of all patients retrieved from electronic patient records were reviewed. RESULTS: Of the 11 isolates identified as C. auris both by ITS and 28S rRNA sequencing, VITEK®2 identified only 5 as C. auris and VITEK® MS v.3.0 was not able to identify any of them as C. auris. Ten isolates	INT	JUL TO DEC	Microbiology, Critical Care	PMID: 31655136

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	(91%) were resistant to fluconazole, whereas all isolates were susceptible to amphotericin B and caspofungin. CONCLUSION: Candida auris can be misidentified in routine microbiology laboratories. Sequencing remains the gold standard if commercial identification systems are not updated.				
440.	<p>Niranjan Prabhu, S. S., Dibu, J., Wilfred, P., Chaudhary, D. K., Jeyaraj, C., Shanthi, M. and Kumar, A. Quantitative estimation of isoniazid content in the commercially available and government-supplied formulations Indian J Tuberc; 2020, 67 (1): 94-97</p> <p>Address: Department of Pharmacology and Clinical Pharmacology, Christian Medical College, Bagayam, Vellore, TamilNadu, India. Christian Medical College, Bagayam, Vellore, TamilNadu, India. Department of Pharmacology and Clinical Pharmacology, Christian Medical College, Bagayam, Vellore, TamilNadu, India. Electronic Address: aniketkumar@cmcvellore.ac.in.</p> <p>BACKGROUND: Multi-drug resistant tuberculosis is on the rise, resulting in treatment failure. One potential reason for drug resistance is the substandard quality of manufactured antituberculous drugs. This study aims at finding out the difference in the quantity of isoniazid between government-supplied tablets and commercially available tablets. METHOD: Tablets from the single most commonly used brand of isoniazid manufactured by a pharmaceutical company and from RNTCP DOTS providing centre were obtained for the estimation of concentration using a spectrophotometer. The results were analysed using Un-paired Student's t-test. RESULTS: Of the 98 isoniazid tablets from each arm studied, none had the strength that deviated from the WHO limit of 90-110%, i.e. 270-330 mg. The mean strength \pmSD of the commercial preparation of isoniazid tablets was found to be 295.16 ± 12.14. The mean strength \pm SD of DOTS isoniazid tablets was found to be 298.69 ± 9.55. The difference observed in the strengths of isoniazid tablets between DOTS and commercial preparation was statistically insignificant ($p = 0.1704$). CONCLUSION: This method to estimate the strength of isoniazid tablets is inexpensive, relatively easy, and considerably accurate to perform, and hence can be employed in primary or secondary care centres to ensure the standard strengths of tablets dispensed from such centres.</p>	NAT	JAN TO JUN	Pharmacology and Clinical Pharmacology	<p>PMID:32192625 SCOPUS H-INDEX:19 IF: 0.380 RG (2018/2019)</p>
441.	<p>Nirmal, B., George, R. and Bindra, M. S. Chronic paronychia with subungual purpura Indian journal of dermatology, venereology and leprology; 2020, 86 (4): 463-465</p> <p>Address: Department of Dermatology-Unit-1, Christian Medical College, Vellore, Tamil Nadu, India Department of Pathology, Christian Medical College, Vellore, Tamil Nadu, India</p>	NAT	JAN TO JUN	Dermatology Unit I, Pathology	<p>PMID: 30829296 SCOPUS H-INDEX:43 IF: 3.030 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
442.	<p>Oommen, A. T., Chandy, V. J., Jeyaraj, C., Kandagaddala, M., Hariharan, T. D., Arun Shankar, A., Poonnoose, P. M. and Korula, R. J. Subtrochanteric femoral shortening for hip centre restoration in complex total hip arthroplasty with functional outcome Bone Jt Open; 2020, 1 (5): 152-159 Address: Unit 2, Department of Orthopaedics, Christian Medical College Hospital, Vellore, Tamil Nadu, India. Department of Radiology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>AIMS: Complex total hip arthroplasty (THA) with subtrochanteric shortening osteotomy is necessary in conditions other than developmental dysplasia of the hip (DDH) and septic arthritis sequelae with significant proximal femur migration. Our aim was to evaluate the hip centre restoration with THAs in these hips. METHODS: In all, 27 THAs in 25 patients requiring THA with femoral shortening between 2012 and 2019 were assessed. Bilateral shortening was required in two patients. Subtrochanteric shortening was required in 14 out of 27 hips (51.9%) with aetiology other than DDH or septic arthritis. Vertical centre of rotation (VCOR), horizontal centre of rotation, offset, and functional outcome was calculated. The mean followup was 24.4 months (5 to 92 months). RESULTS: The mean VCOR was 17.43 mm (9.5 to 27 mm) and horizontal centre of rotation (HCOR) was 24.79 mm (17.2 to 37.6 mm). Dislocation at three months following acetabulum reconstruction required femoral shortening for offset correction and hip centre restoration in one hip. Mean horizontal offset was 39.72 (32.7 to 48.2 mm) compared to 42.89 (26.7 to 50.6 mm) on the normal side. Mean Harris Hip Score (HHS) of 22.64 (14 to 35) improved to 79.43 (68 to 92). Mean pre-operative shortening was 3.95 cm (2 to 8 cm). Residual limb length discrepancy was 1.5 cm (0 to 2 cm). Sciatic neuropraxia in two patients recovered by six months, and femoral neuropraxia in one hip recovered by 12 months. Mean Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) was 13.92 (9 to 19). Mean 12-item short form survey (SF-12) physical scores of 50.6 and mental of 60.12 were obtained. CONCLUSION: THA with subtrochanteric shortening is valuable in complex hips with high dislocation. The restoration of the hip centre of rotation and offset is important in these hips. LEVEL OF EVIDENCE IV: Femoral shortening useful in conditions other than DDH and septic sequelae. Restoration of hip centre combined with offset to be planned and ensured.</p>	INT	JUL TO DEC	Orthopaedics, Radiology	<p>PMID:33241226 PMC ID:7684393</p>
443.	<p>Oommen, I., Chandramohan, A., Raji, P. S., Thomas, A., Joel, A., Samuel Ram, T. and Peedicayil, A. Clinical significance of CT detected enlarged cardiophrenic nodes in ovarian cancer patients Abdom Radiol (NY); 2020, Address: Department of Radiology, Christian Medical College, Vellore, 632004, India. Department of Radiology, Christian Medical College, Vellore, 632004, India.</p>	INT	JAN TO JUN	Radiology, Gynecological Oncology, Medical Oncology, Radiation Oncology	<p>PMID:32577780 SCOPUS H-INDEX:70 IF: 1.506 (2017)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>anuradhachandramohan@gmail.com. Department of Gynecological Oncology, Christian Medical College, Vellore, 632004, India. Department of Medical Oncology, Christian Medical College, Vellore, 632004, India. Department of Radiation Oncology, Christian Medical College, Vellore, 632004, India.</p> <p>AIM: To assess the relevance of enlarged cardiophrenic lymph nodes (CPLN) seen on staging CT of ovarian cancer patients. METHODS: Retrospective cohort study of consecutive patients with primary ovarian malignancy who underwent staging CT between 2013 and 2016. Images were reviewed by two radiologists in consensus. Enlarged CPLN was defined as a short axis diameter ≥ 7 mm. Clinical and imaging findings; management decisions; outcome of cytoreductive surgery and survival were compared between patients with and without enlarged CPLN on staging CT. RESULTS: Enlarged CPLN were found in 42 patients (41.5%) and was significantly associated with higher radiological PCI ($p = 0.002$); large volume upper abdominal disease ($p = 0.001$); enlarged lesser omental, periportal and supra-renal para-aortic lymph nodes ($p \leq 0.05$); unfavorable sites of disease involvement ($p < 0.001$) and extraperitoneal metastases ($p = 0.004$). While there was a significant difference in the number of patients who underwent primary and interval debulking ($p = 0.002$), there was no difference in the rates of optimal cytoreduction between the two groups ($p = 0.469$). After adjusting for outcomes of cytoreductive surgery, CT detected enlarged CPLN did not adversely affect the overall survival, HR 1.5 (0.708-3.4), $p = 0.272$, but adversely affected the recurrence free survival (HR 2.38 (1.25-4.53)), $p = 0.008$. CONCLUSIONS: Enlarged CPLN detected on staging CT in patients with primary ovarian cancer is clinically significant even in the developing world and is associated with higher volume of peritoneal, non-regional nodal and extraperitoneal disease and lower recurrence free survival.</p>				
444.	<p>Oswald, W. E., Kennedy, D. S., Farzana, J., Kaliappan, S. P., Atindegla, E., Houngbégnon, P., Chisambi, A., Witek-Mcmanus, S., Galagan, S. R., Emmanuel-Fabula, M., Gwayi-Chore, M. C., Legge, H., Yard, E., Kalua, K., Ibikounlé, M., Ajjampur, S. S. R., Means, A. R., Ásbjörnsdóttir, K. H., Halliday, K. E., Walson, J. L. and On Behalf of the Deworm3 Trials, Team</p> <p>Development and application of an electronic treatment register: a system for enumerating populations and monitoring treatment during mass drug administration</p> <p>Global Health Action; 2020, 13 (1): Address: Faculty of Infectious and Tropical Diseases, London School of Hygiene Tropical Medicine, London, United Kingdom The Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences, Christian Medical College, Vellore, India Institut de Recherche Clinique du Bénin (IRCB), Calavi, Benin</p>	INT	JUL TO DEC	Wellcome Trust Research Laboratory	SCOPUS

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Blantyre Institute for Community Outreach, Lions Sight First Eye Hospital, Blantyre, Malawi</p> <p>Département de Zoologie, Faculté des Sciences et Techniques, Université d'Abomey-Calavi, Cotonou, Benin</p> <p>Department of Epidemiology, University of Washington, Seattle, WA, United States</p> <p>DeWorm3, Division of Life Sciences, Natural History Museum, London, United Kingdom</p> <p>Department of Global Health, University of Washington, Seattle, WA, United States</p> <p>We developed an electronic treatment register for the DeWorm3 Project, a cluster-randomised, controlled trial in Benin, India, and Malawi testing the feasibility of interrupting transmission of soil-transmitted helminths through community-wide mass drug administration. The electronic treatment register was designed in xlsform, deployed via the SurveyCTO mobile data collection platform, and implemented on smartphones running the Android operating system. The versatile system enables collection of census and treatment status information, facilitates data aggregation and visualisation, and permits real-time feedback loops during implementation of mass drug administration. Here we describe the system's design and use within the DeWorm3 Project and key features, and by sharing the register here, we hope our readers will further explore its use within their research and disease-control activities. © 2020, © 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.</p>				
445.	<p>Packiasabapathy, S., Aruldas, B. W., Horn, N., Overholser, B. R., Quinney, S. K., Renschler, J. S. and Sadhasivam, S.</p> <p>Pharmacogenomics of methadone: a narrative review of the literature</p> <p>Pharmacogenomics; 2020, 21 (12): 871-887</p> <p>Address: Department of Anesthesia, Indiana University School of Medicine, Indianapolis, IN 46202, USA.</p> <p>Division of Clinical Pharmacology, Department of Medicine, Indiana University School of Medicine, Indianapolis, IN 46202, USA.</p> <p>Department of Pharmacology & Clinical Pharmacology, Christian Medical College, Vellore, 632002, India.</p> <p>Department of Pharmacy Practice, Purdue University College of Pharmacy, Indianapolis, IN 47907, USA.</p> <p>Department of Obstetrics & Gynecology, Indiana University School of Medicine, Indianapolis, IN 46202, USA.</p> <p>Center for Computational Biology & Bioinformatics, Indiana University School of Medicine, Indianapolis, IN 46202, USA.</p> <p>Background: Methadone, a synthetic opioid with longer duration of action and lower abuse potential compared with morphine, is used to prevent opioid withdrawal, as well as to manage chronic and acute surgical pain. The variability in response to methadone has been widely recognized. The purpose of this article is to review the literature on the pharmacogenetic factors underlying this variability.</p> <p>Materials & methods: This is a narrative overview of the literature on the genetic</p>	INT	JUL TO DEC	Pharmacology & Clinical Pharmacology	<p>PMID: 32705966</p> <p>PMC:7444627</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	variants affecting pharmacodynamics and pharmacokinetics of methadone, retrieved from searches of databases such as PubMed and google scholar. Discussion: Clinical responses to methadone may be affected by genetic variants in the opioidergic, dopaminergic and neurotrophic pathways. Polymorphisms in genes related to disposition and elimination of methadone alter the pharmacokinetics, and possibly pharmacodynamics of methadone. Cytochrome P450 enzymes and P-glycoprotein variants contribute to the interindividual variability in methadone pharmacokinetics. Evidence for single gene variants affecting methadone response remains weak. Multiple genetic variants must be considered in conjunction to improve predictive ability. Conclusion: Evidence remains scarce at this time, to recommend pharmacogenetic testing before methadone administration. Well-powered clinical studies are needed with population pharmacokinetic-pharmacodynamic modeling and multigenetic signature-based predictions to enable tailored use of methadone in clinical practice.				
446.	<p>Padiyar, S. and Danda, D. Revisiting cardiac safety of hydroxychloroquine in rheumatological diseases during COVID-19 era: Facts and myths Eur J Rheumatol; 2020, Address: Department of Clinical Immunology and Rheumatology, Christian Medical College, Vellore, India. Severe acute respiratory syndrome coronavirus 2 has spread across the globe affecting more than 10 million people as of August 2020. With the pandemic spreading at such an alarming rate, a lot of efforts are in the process of identification of an effective treatment at it's earliest. Hydroxychloroquine (HCQ) is such a drug that is being studied as a repurposed agent, although the early results are still inconclusive. However, an important adverse effect that has raised concerns in the recent times is its possible cardiac toxicity, mainly the 'QT,' prolongation in electro-cardiogram, which has created a sense of apprehension for its use in traditional indications like rheumatological conditions. In decades of HCQ use by rheumatologists, this cardiac toxicity was rarely ever seen. So, what is different in the current coronavirus disease 2019 (COVID-19) era? This review outlines various studies on HCQ reporting cardiac adverse events in patients with rheumatic diseases as well as, in patients with COVID-19 infection. In addition, two important observations were noticed; first, the doses that have been used in the current COVID-19 scenario are much higher than what are used in rheumatology. Second, COVID-19 infection may by itself lead to intrinsic cardiac abnormalities, which is probably acting as a confounder. Most of the available and credible data suggest that HCQ is a safe drug, including the RECOVERY trial stating no cardiotoxicity by HCQ. This review reinforces the safety profile of HCQ in a data-driven manner and addresses the concerns of the physicians. However, its cautious use in those with pre-existing cardiac abnormalities cannot be overemphasized.</p>	INT	JUL TO DEC	Clinical Immunology and Rheumatology	PMID: 33044166
447.	<p>Padiyar, S., Arya, S., Surin, A., Viswanath, V. and Danda, D. Comparison of safety, efficacy and cost between oral pulse cyclophosphamide</p>	INT	JAN TO JUN	Clinical Immunology and Rheumatology	PMID:32452167 WOS:000535173200001

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>versus intravenous cyclophosphamide pulse therapy in severe systemic lupus erythematosus Int J Rheum Dis; 2020, 23 (6): 800-804</p> <p>Address: Department of Clinical Immunology and Rheumatology, Christian Medical College, Vellore, India.</p> <p>OBJECTIVES: The aim of this study is to compare efficacy, toxicity and cost between oral and intravenous cyclophosphamide (CYC) pulse therapy in inducing remission (Systemic Lupus Erythematosus Disease Activity Index [SLEDAI] <3) in severe SLE. METHODS: We retrospectively checked the hospital records of patients between the years 2000 and 2018, who had been administered oral cyclophosphamide pulse and intravenous (IV) cyclophosphamide pulse. SLEDAI at baseline and after 6 months of therapy were noted. The statistical analysis was done using Mann-Whitney U test. The cost was also calculated. RESULTS: We included 45 patients in this study, 21 in the oral pulse group and 24 in the IV group. The median age of patients in the oral and IV groups were 29 (interquartile range [IQR] 22-37) and 26 (IQR 19.25-0.75) years respectively. Median SLEDAI at baseline was comparable between the 2 groups (oral 18.0 [IQR 15.0-26.0]; IV 14.5 [IQR 11.0-20.0] P = .151). At the end of 6 months of treatment, it was 0.0 (IQR 0.0-4.0) in the oral group, as against 2.0 (IQR 0.0-5.5) in IV group (P = .676). There was no major adverse event in either group. Oral cyclophosphamide pulse therapy was more economical as compared to IV cyclophosphamide [630 Indian National rupees(INR)/ 8.85 US dollars(USD) in the IV arm and 50 INR/0.7 USD in the oral arm] (P < .001). CONCLUSION: This study concludes that oral cyclophosphamide pulse therapy is an economical option and there was no difference in efficacy and safety between oral cyclophosphamide pulse therapy and IV pulse cyclophosphamide therapy.</p>				<p>SCOPUS H-INDEX:38 IF: 1.938 BIOXBIO (2018/2019)</p>
448.	<p>Pai, A. A., Devasia, A. J., Panetta, J. C., Mani, S., Illangeswaran, R. S. S., Mohanan, E., Balakrishnan, B., Lakshmi, K. M., Kulkarni, U., Aboobacker, F. N., Korula, A., Abraham, A., Srivastava, A., Mathews, V., George, B. and Balasubramanian, P. Pharmacokinetics and Efficacy of Generic Melphalan Is Comparable to Innovator Formulation in Patients With Multiple Myeloma Undergoing Autologous Stem Cell Transplantation Clinical Lymphoma, Myeloma and Leukemia; 2020, 20 (2): 130-135.e1</p> <p>Address: [Pai, Aswin Anand; Devasia, Anup J.; Mani, Sathya; Illangeswaran, Raveen Stephen Stallon; Mohanan, Ezhilpavai; Balakrishnan, Balaji; Lakshmi, Kavitha M.; Kulkarni, Uday; Aboobacker, Fouzia N.; Korula, Anu; Abraham, Aby; Srivastava, Alok; Mathews, Vikram; George, Biju; Balasubramanian, Poonkuzhali] Christian Med Coll & Hosp, Dept Hematol, Vellore, Tamil Nadu, India. [Panetta, John Carl] St Jude Childrens Res Hosp, Dept Pharmaceut Sci, Memphis, TN USA. Balasubramanian, P (reprint author), Christian Med Coll & Hosp, Dept Hematol, Vellore, Tamil Nadu, India.</p>	INT	JAN TO JUN	Clinical Hematology	<p>WOS:000513918800021 SCOPUS H-INDEX:50 IF: 1.605 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>bpoonkuzhali@cmcvellore.ac.in</p> <p>Pharmacokinetics and therapeutic efficacy were investigated in patients with multiple myeloma receiving both generic and innovator melphalan (MEL) formulation for conditioning pre autologous stem cell transplantation. Both the MEL formulations were comparable in terms of pharmacokinetics and efficacy, suggesting generic MEL as a low-cost alternative to innovator MEL for autologous stem cell transplantation conditioning in multiple myeloma. Background: High-dose melphalan (MEL) is the standard conditioning regimen used for autologous stem cell transplantation (ASCT) in patients with multiple myeloma (MM). Generic MEL is routinely used in various transplant centers across the world including ours due to its reduced cost and ease of availability. We compared the pharmacokinetics (PK) and the clinical efficacy of generic MEL with that of the innovator formulation in MM patients undergoing ASCT. Patients and Methods: Sixty-three patients diagnosed with MM receiving high-dose MEL were included in this study. MEL levels in plasma were measured using a liquid chromatography tandem mass spectrometry (HPLC/MS-MS) protocol and non-linear mixed effects modeling was used to evaluate the PK of the data. Results: The interindividual variability (IIV) in MEL area under the concentration versus time curve (AUC) and clearance (CL) were 4.39, 5.88-fold for generic, and 4.34, 6.85-fold for the innovator formulation, respectively. The median MEL AUC and CL were comparable between the 2 formulations. The population PK analysis showed age and creatinine CL as the only significant covariates explaining IIV in MEL AUC/CL. Analysis of MEL PK parameters with clinical outcome showed no significant differences in terms of onset and severity of mucositis, day to neutrophil and platelet engraftment, as well as response status on day 100 post ASCT between patients receiving generic or innovator formulations of MEL. In addition, neither MEL AUC nor CL was found to be associated with day +100 response. Conclusion: Our study suggests that the PK and efficacy of the generic MEL is comparable to the innovator formulation</p>				
449.	<p>Palwe, S., Veeraraghavan, B., Periasamy, H., Khobragade, K. and Kharat, A. S. Unorthodox Parenteral beta-Lactam and beta-Lactamase Inhibitor Combinations: Flouting Antimicrobial Stewardship and Compromising Patient Care Antimicrobial Agents and Chemotherapy; 2020, 64 (5): 7</p> <p>Address: [Palwe, Snehal; Khobragade, Kshama] SB Coll Sci, Aurangabad, Maharashtra, India. [Veeraraghavan, Balaji] Christian Med Coll & Hosp, Dept Clin Microbiol, Vellore, Tamil Nadu, India. [Periasamy, Hariharan] Univ Madras, Cent Leather Res Inst, Chennai, Tamil Nadu, India. [Kharat, Arun S.] Jawaharlal Nehru Univ, Lab Appl Microbiol, New Delhi, India. Kharat, AS (reprint author), Jawaharlal Nehru Univ, Lab Appl Microbiol, New Delhi, India. arunkhrat2007@gmail.com</p>	INT	JAN TO JUN	Clinical Microbiology	<p>WOS:000528256200009 SCOPUS H-INDEX:247 IF: 4.715 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	In India and China, indigenous drug manufacturers market arbitrarily combined parenteral beta-lactam and beta-lactamase inhibitors (BL-BLIs). In these fixed-dose combinations, sulbactam or tazobactam is indiscriminately combined with parenteral cephalosporins, with BLI doses kept in ratios similar to those for the approved BL-BLIs. Such combinations have been introduced into clinical practice without mandatory drug development studies involving pharmacokinetic/pharmacodynamic, safety, and efficacy assessments being undertaken. Such unorthodox combinations compromise clinical outcomes and also potentially contribute to resistance development.				
450.	<p>Panda, S., Irodi, A., Daniel, R., Chacko, B. R., Vimala, L. R. and Gnanamuthu, B. R. Utility of cine MRI in evaluation of cardiovascular invasion by mediastinal masses Indian J Radiol Imaging; 2020, 30 (3): 280-285</p> <p>Address: Department of Radiology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Cardiothoracic Surgery, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND: Accurate imaging assessment of cardiovascular invasion by mediastinal masses is essential for determining surgical feasibility. This can sometimes be difficult on CT owing to limited space available in the mediastinum, resulting in mediastinal masses abutting and indenting adjacent cardiovascular structures. Cine MRI may aid in such situations by demonstrating differential mobility. AIMS AND OBJECTIVES: To evaluate the role of cine MRI in assessing cardiovascular invasion by mediastinal masses, by evaluating sliding motion and the presence of chemical shift artifact between the mediastinal mass and apposing structures. MATERIAL AND METHODS: Retrospective study of 44 patients with mediastinal masses, with equivocal involvement of 162 cardiovascular structures on CT scan, in whom cine MRI was done. Involvement on CT was considered equivocal when there was a loss of intervening fat plane and broad surface (>3 cm) or angle (>90°) of contact between the mediastinal mass and cardiovascular structure. The presence of either sliding movement or type 2 chemical shift artifact or both between mass and the cardiovascular structure was considered as no adherence or invasion. The absence of both the parameters was considered as the presence of invasion or adhesion. Imaging findings were correlated with intraoperative findings. RESULTS: After excluding 25 cardiovascular structures in 7 patients, 137 cardiovascular structures whose involvement was suspected on CT were evaluated in 37 patients with mediastinal masses. In all, 31 cardiovascular structures showed invasion on MRI out of which 28 structures were invaded or adhered intraoperatively and 106 cardiovascular structures showed no invasion on MRI out of which 97 structures were intraoperatively not invaded/adhered. The sensitivity, specificity and accuracy of our study are 75.7%, 97% and 91.2%, respectively. CONCLUSION: Cine MRI can be used as an effective tool in patients with equivocal cardiovascular invasion by mediastinal masses on CT scans.</p>	NAT	JUL TO DEC	Radiology, Cardiothoracic Surgery	PMID: 33273761 PMC:7694725
451.	Panwar, J., Hsu, C. C. T., Tator, C. H. and Mikulis, D.	INT	JAN TO JUN	Radiology	WOS:000510742400001

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Magnetic Resonance Imaging Criteria for Post-Concussion Syndrome: A Study of 127 Post-Concussion Syndrome Patients Journal of Neurotrauma; 2020, 37 (10): 1190-1196</p> <p>Address: [Panwar, Jyoti] Christian Med Coll & Hosp, Dept Radiol, Vellore, Tamil Nadu, India. [Hsu, Charlie Chia-Tsong] Gold Coast Univ Hosp, Dept Med Imaging, Southport, Qld, Australia. [Tator, Charles H.] Toronto Western Hosp, Dept Surg, Div Neurosurg, Toronto, ON, Canada. [Mikulis, David] Univ Toronto, Dept Med Imaging, Div Neuroradiol, Toronto, ON, Canada. Mikulis, D (reprint author), Toronto Western Hosp, Dept Med Imaging, 399 Bathurst St, Toronto, ON, Canada. david.mikulis@uhn.ca</p> <p>The purpose of this study was to assess the frequency of structural lesions on conventional magnetic resonance imaging (MRI) of the brain in a large prospective cohort of post-concussion syndrome (PCS) patients. Conventional 3T MRI was used to evaluate 127 prospectively enrolled PCS patients and 29 controls for non-specific white matter hyperintensities (WMH) and traumatic structural lesions, including encephalomalacia, atrophy, microhemorrhage, subarachnoid hemorrhage, and cortical siderosis. All PCS patients had a clinical diagnosis of one or more concussions based on the Concussion in Sport Group (CISG) consensus statements. Patients with recognized intracranial hemorrhage on prior head computed tomography (CT) and MRI were excluded. The differences between the PCS and control groups were analyzed. Four patients in the PCS group (3.1%) had positive findings, which included microhemorrhages in two patients and encephalomalacia in another two patients. None of these lesions was present in the control group, but there was no statistical difference between the two groups (p = 0.5 for microhemorrhage and p = 0.5 for encephalomalacia). In the PCS group, 28 patients (22%) had WMH (15.7% had 1-10 lesions and 6.3% had >10 lesions), and these results did not differ from the age-matched control (20.6%, all with 1-10 lesions; p = 0.9) The location of the WMH showed no significant difference in the number of juxtacortical WMH between the PCS and control groups (p = 0.5). Structural lesions were rare in PCS in this study, and the presence of such findings suggests a more severe form of traumatic brain injury. Our data support the role for MRI in the diagnosis of PCS by exclusion of atrophy, encephalomalacia, and all forms of intracranial hemorrhage. The presence of WMH irrespective of number is not an exclusion. This is the first description of the MRI criteria for PCS.</p>				<p>SCOPUS H-INDEX:92 IF: 2.267 BIOXBIO (2018/2019)</p>
452.	<p>Panwar, J., Patel, H., Tolend, M., Akikusa, J., Herregods, N., Highmore, K., Inarejos Clemente, E. J., Jans, L., Jaremko, J. L., Von Kalle, T., Kirkhus, E., Meyers, A. B., Van Rossum, M. A., Rumsey, D. G., Stimec, J., Tse, S. M., Twilt, M., Tzaribachev, N. and Doria, A. S.</p> <p>Toward Developing a Semiquantitative Whole Body-MRI Scoring for Juvenile Idiopathic Arthritis: Critical Appraisal of the State of the Art, Challenges, and Opportunities</p>	INT	JAN TO JUN	Radiology	<p>SCOPUS H-INDEX:141 IF: 3.754 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Academic Radiology; 2020, Address: Department of Radiology, Christian Medical College and Hospital, Vellore, India Department of Diagnostic Imaging, The Hospital for Sick Children, Department of Medical Imaging, University of Toronto, Toronto, ON, Canada Department of Radiology, Birmingham Children's Hospital, Birmingham, United Kingdom Department of Radiology, Royal Children's Hospital Melbourne, Melbourne, Victoria, Australia Department of Radiology, Ghent University, Ghent, Belgium Department of Radiology, Children's Hospital of Eastern Ontario, Ottawa, Ontario, Canada Department of Radiology, Hospital Sant Joan de Deu, Barcelona, Spain Department of Radiology, University of Alberta, Edmonton, Alberta, Canada Radiologisches Institut, Olga hospital Klinikum, Stuttgart, Germany Department of Radiology, Oslo University Hospital, Oslo, Norway Department of Radiology, Nemours Children's Hospital, Orlando, FL, United States Amsterdam Rheumatology and immunology Center, Reade, and Emma Children's Hospital Amsterdam UMC, University of Amsterdam, Amsterdam, Netherlands Division of Rheumatology, Stollery Children's Hospital, University of Alberta, Edmonton, Alberta, Canada Division of Rheumatology, The Hospital for Sick Children, Toronto, Ontario, Canada Department of Pediatrics, Division of rheumatology, Alberta Children's Hospital, Cumming School of Medicine, University of Calgary, Calgary, Alberta, Canada Pediatric Rheumatology Research Institute, Bad Bramstedt, Germany</p> <p>With powerful new therapies available for management of juvenile idiopathic arthritis (JIA), early diagnosis leading to appropriate treatment may prevent long-term structural joint damage. Although magnetic resonance imaging (MRI) is typically used to assess individual body parts, indications for whole body (WB) MRI are increasing. Its utility as a diagnostic and monitoring tool has already been widely investigated in adult rheumatology patients, but less so in pediatric rheumatologic patients. This paper is a comprehensive review of scoring systems and a proposal for the conceptual development of a WB-MRI scoring system for the evaluation of JIA. In this review we identify, summarize, and critically appraise the available literature on the use of WB-MRI in inflammatory arthritis, addressing relevant considerations on components of a classification system that can lead to the development of a future pediatric WB-MRI scoring system for use in children with JIA. We also discuss advantages and challenges of developing such a WB-MRI scoring system for assessment of JIA and outline next steps toward the conceptual development of this scoring system. © 2020</p>				
453.	<p>Panwar, J., Tolend, M., Lim, L., Tse, S. M., Doria, A. S., Laxer, R. M. and Stimec, J. Whole-body MRI Quantification for Assessment of Bone Lesions in CNO Patients</p>	INT	JUL TO DEC	Radiodiagnosis	PMID: 32934131

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Treated with Pamidronate: A Prevalence, Reproducibility, and Responsiveness Study J Rheumatol; 2020, Address: From the Department of Radiodiagnosis, Christian Medical College and Hospital, Vellore, India; Department of Diagnostic Imaging, The Hospital for Sick Children, Department of Medical Imaging, University of Toronto, Toronto, ON, Canada; Division of Pediatric Rheumatology, Department of Pediatrics, University of Alberta; Edmonton, AB, Canada; Division of Rheumatology, The Hospital for Sick Children, University of Toronto, Toronto, ON, Canada. Address correspondence to Jyoti Panwar, MD, FRCR, Professor, Department of Radiodiagnosis, Christian Medical College and Hospital, Vellore, India, Phone: +91-638-5209-311. Department of Diagnostic Imaging, The Hospital for Sick Children, Department of Medical Imaging, University of Toronto, Toronto, ON, Canada. Email: drjyotimch@gmail.com, jyoti.panwar@sickkids.ca.</p> <p>OBJECTIVE: The purpose of this study was 1) to assess the inter-reader reliability in detecting and scoring the inflammatory bone lesions in pediatric patients with chronic nonbacterial osteomyelitis (CNO) by using WB-MRI, and 2) to evaluate the responsiveness of the MRI-detected CNO lesions to pamidronate therapy. METHODS: Eighty-eight WB-MRI examinations were independently reviewed and scored by two radiologists blinded to clinical details in 32 retrospectively enrolled pediatric patients with CNO. Inflammatory bone lesions, soft tissue abnormality, and bony structural changes were scored before and after pamidronate therapy. Lesion responsiveness was calculated by using standardized response mean and inter-reader reliability was assessed by kappa statistics. RESULTS: There was good to excellent inter-reader agreement for the detection and quantification of bone lesions. After the first cycle of pamidronate in all 32 patients, 96 of the 279 lesions (34%) (after excluding 108 lesions of hand and feet) resolved, while in a subset of 11 patients with two or more cycles, 76% of lesions resolved after the second cycle. Twenty-one (7.5%) lesions worsened and 46 (16.4%) new lesions developed after one cycle in all 32 patients. In these 11 patients, the number of worsened lesions reduced to 2 (2%) and new lesions to 14 (14.9%) after the second cycle as detected on MRI. Vertebral lesions had the highest response to treatment. CONCLUSION: WB-MRI is a reliable tool for objective quantification and assessment of response to treatment of pediatric CNO bone lesions and could be used to monitor disease activity for clinical and research purposes.</p>				
454.	<p>Parasrampur, S., Patloori, S. C. S., Karuppusami, R., Chase, D. and Roshan, J. Cardiovascular implantable electronic device lead removal in a resource-constrained setting: A single-center experience from India Indian Pacing and Electrophysiology Journal; 2020, 20 (1): 8-13</p> <p>Address: Department of Cardiology, Christian Medical College, Vellore, India Department of Biostatistics, Christian Medical College, Vellore, India</p> <p>Background: Data from large-volume centers in developed countries, using</p>	NAT	JAN TO JUN	Cardiology, Biostatistics	<p>SCOPUS H-INDEX:24 IF: 0.420 RESURCHIFY (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	dedicated tools, show a high success rate with a good safety record for the percutaneous lead removal procedure. However, there are constraints to replicate the results in a resource-poor setting and there is limited data from India. Methods: We retrospectively analyzed lead removal procedures performed in our institution from 2008 to 2019. Results: Seventy-five patients underwent percutaneous removal of 138 leads. Of these, 44 procedures and 80 leads qualified as extraction with a median dwell time of 52.1 (IQR 28.2–117.2) months. Overall, 33/44 (75.0%) procedures were successful and 65/80 (81.2%) leads were successfully extracted. Manual traction was successful in the extraction of 44/57 (77.2%) leads. All leads implanted less than 2.7 years could be removed with manual traction alone. Specialized tools were used in 23 leads and 21 (91.3%) of those could be successfully extracted. Inability to use dedicated tools was an independent predictor of procedural failure (adjusted OR 14.0; 95% CI 1.8–110.2; p-value 0.012). Right-sided implant (adjusted OR 12.6; 95% CI 1.3–119.5; p-value 0.027) was also independently associated with failure. There was 1 death (1.3%) and minor complications occurred in 6 (8.0%) patients. Conclusions: In a resource-limited setting, percutaneous lead extraction of predominantly pacemaker leads by manual traction methods achieved success in extracting about three-fourths of the leads. Inability to use specialized tools was the main factor limiting success. The complication rate was low. © 2019 Indian Heart Rhythm Society				
455.	<p>Pasquini, M. C., Srivastava, A., Ahmed, S. O., Aljurf, M., Atsuta, Y., Doleysh, C., Galeano, S., Gluckman, E., Greinix, H., Hale, G., Hari, P., Hashmi, S. K., Kamani, N., Laughlin, M. J., Niederwieser, D., Seber, A., Szer, J., Snowden, J. A., Van Biesen, K., Watry, P., Weisdorf, D. J. and Apperley, J.</p> <p>Worldwide Network for Blood and Marrow Transplantation (WBMT) recommendations for establishing a hematopoietic cell transplantation program (Part I): Minimum requirements and beyond Hematol Oncol Stem Cell Ther; 2020, 13 (3): 131-142 Address: Medical College of Wisconsin, Milwaukee, WI, USA. Electronic Address: mpasquini@mcw.edu. Department of Hematology, Christian Medical College, Vellore, India. Oncology Center, King Faisal Specialist Hospital & Research Center, Riyadh, Saudi Arabia. Japanese Data Center for Hematopoietic Cell Transplantation (JDCHCT), Nagoya, Japan. Medical College of Wisconsin, Milwaukee, WI, USA. Unidad de Hematología - Hospital Británico, Montevideo, Uruguay. Hôpital Saint-Louis, Paris, France. Medical University of Graz, Graz, Austria. Johns Hopkins All Children's Hospital, St. Petersburg, FL, USA. AABB, Bethesda, MD, USA. Cleveland Cord Blood Center, Cleveland, OH, USA. University of Leipzig, Leipzig, Germany.</p>	INT	JUL TO DEC	Hematology	<p>PMID: 31449780 PMC:7125509</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Hospital Samaritano, São Paulo, Brazil. The Royal Melbourne Hospital, Melbourne, Australia. JAS Department of Haematology, Sheffield Teaching Hospitals NHS Foundation Trust, Sheffield, UK. Weill Cornell Medical College, New York, NY, USA. University of Minnesota, Minneapolis, MN, USA. Haematology Department, Imperial College, Hammersmith Hospital, London, UK.</p> <p>Hematopoietic cell transplantation (HCT) is a highly complex procedure that requires a dedicated multidisciplinary team to optimize its safety. In addition, institutions may have different needs regarding indications based on regional disease prevalence or may have an interest in developing specialized services. Yet, structured recommendations are not commonly available. Here, the Transplant Center and Recipient Issues Standing Committee for the Worldwide Network for Blood and Marrow Transplantation (WBMT) organized a structured review of all pertinent elements to establish a transplant program. First, we solicited components from committee members and grouped them in domains (infrastructure, staff, cell processing laboratory, blood banking, laboratory, radiology, pharmacy, HLA testing, ancillary services and quality). Subsequently, reviewers scored all elements on a 7-point scale, from an absolute requirement (score of 1) to not required (score of 7). An independent group of five experienced transplant physicians reviewed the rankings. Minimum requirements to establish any HCT program were identified among elements with mean score of ≤ 2.0, and specific elements for allogeneic and autologous HCT were identified. Mean scores $>2.0-4.0$ were classified as preferred recommendation, and mean scores of >4.0 to ≤ 7.0 were considered ideal recommendations for advanced and complex types of transplantation. This structured set of recommendations guides the prioritization of minimum requirements to establish a transplant program and to set the path for expansion and further development.</p>				
456.	<p>Patel, A., Kaur, H., Xess, I., Michael, J. S., Savio, J., Rudramurthy, S., Singh, R., Shastri, P., Umabala, P., Sardana, R., Kindo, A., Capoor, M. R., Mohan, S., Muthu, V., Agarwal, R. and Chakrabarti, A.</p> <p>A multicentre observational study on the epidemiology, risk factors, management and outcomes of mucormycosis in India Clinical Microbiology and Infection; 2020, Address: Department of Infectious Diseases, Sterling Hospital, Ahmedabad, India Department of Internal Medicine, University of South Florida, Tampa, FL, United States Department of Microbiology, Postgraduate Institute of Medical Education and Research, Chandigarh, India Department of Microbiology, All India Institute of Medical Sciences, New Delhi, India Department of Clinical Microbiology, Christian Medical College, Vellore, India St John's Medical College Hospital, Bangalore, India</p>	INT	JAN TO JUN	Clinical Microbiology	SCOPUS H-INDEX:142 IF: 1.605 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Department of Microbiology, JIPMER, Pondicherry, India Intensive Care Medicine, Sir Ganga Ram Hospital, New Delhi, India Department of Microbiology, Nizam's Institute of Medical Sciences, Hyderabad, India Department of Microbiology, Indraprastha Apollo Hospital, New Delhi, India Department of Microbiology, Sri Ramachandra Medical College, Chennai, India Vardhman Mahaveer Medical College and Safdarjang Hospital, New Delhi, India Department of Microbiology, Christian Medical College, Ludhiana, India Department of Pulmonary Medicine, Postgraduate Institute of Medical Education and Research, Chandigarh, India</p> <p>Objectives: To describe the epidemiology, management and outcome of individuals with mucormycosis; and to evaluate the risk factors associated with mortality. Methods: We conducted a prospective observational study involving consecutive individuals with proven mucormycosis across 12 centres from India. The demographic profile, microbiology, predisposing factors, management and 90-day mortality were recorded; risk factors for mortality were analysed. Results: We included 465 patients. Rhino-orbital mucormycosis was the most common (315/465, 67.7%) presentation followed by pulmonary (62/465, 13.3%), cutaneous (49/465, 10.5%), and others. The predisposing factors included diabetes mellitus (342/465, 73.5%), malignancy (42/465, 9.0%), transplant (36/465, 7.7%), and others. Rhizopus species (231/290, 79.7%) were the most common followed by Apophysomyces variabilis (23/290, 7.9%), and several rare Mucorales. Surgical treatment was performed in 62.2% (289/465) of the participants. Amphotericin B was the primary therapy in 81.9% (381/465), and posaconazole was used as combination therapy in 53 (11.4%) individuals. Antifungal therapy was inappropriate in 7.6% (30/394) of the individuals. The 90-day mortality rate was 52% (242/465). On multivariate analysis, disseminated and rhino-orbital (with cerebral extension) mucormycosis, shorter duration of symptoms, shorter duration of antifungal therapy, and treatment with amphotericin B deoxycholate (versus liposomal) were independent risk factors of mortality. A combined medical and surgical management was associated with a better survival. Conclusions: Diabetes mellitus was the dominant predisposing factor in all forms of mucormycosis. Combined surgical and medical management was associated with better outcomes. Several gaps surfaced in the management of mucormycosis. The rarer Mucorales identified in the study warrant further evaluation. © 2019 European Society of Clinical Microbiology and Infectious Diseases</p>				
457.	<p>Patel, V., Mazumdar-Shaw, K., Kang, G., Das, P. and Khanna, T. Reimagining India's health system: a Lancet Citizens' Commission The Lancet; 2020, Address: Harvard Medical School and Harvard T H Chan School of Public Health, Boston, MA, USA; Sangath, Goa, India.</p>	INT	JUL TO DEC	Wellcome Trust Research Laboratory	PMID:33308485

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Biocon Ltd, Bangalore, India. The Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences, Christian Medical College, Vellore, India. The Lancet, London, UK. Harvard Business School and Lakshmi Mittal and Family South Asia Institute, Harvard University, Cambridge, MA 02138, USA. Electronic address: tkhanna@hbs.edu.</p>				
458.	<p>Patil, A., Jerang, Y. and Mathew, J. Hydroxychloroquine-induced auditory toxicity Indian Journal of Rheumatology; 2020, 15 (1): 53-55</p> <p>Address: Department of Rheumatology and Clinical Immunology, CMC, Vellore, Tamil Nadu 632 004, India Department of Rheumatology, Tomo Riba Institute, Health and Medical Sciences, Papumpare, Arunachal Pradesh, India</p> <p>A 51-year-old female with mixed connective tissue disease presented with bilateral sensorineural hearing loss. The hearing deficit was gradually progressive over a period of 6 months. On evaluation, no obvious cause for hearing was evident. Due to ototoxic potential of hydroxychloroquine, we decided to stop the drug and observe for improvement. Over time, her hearing loss stabilized, with improvement in audiometric findings. Hydroxychloroquine induced auditory toxicity is rare. Increased awareness and early recognition may minimize damage. © 2020 Indian Journal of Rheumatology IF: Published by Wolters Kluwer - Medknow.</p>	NAT	JAN TO JUN	Clinical Immunology and Rheumatology	<p>SCOPUS H-INDEX:10 IF: 0.300 RG (2018/2019)</p>
459.	<p>Patil, P. and Chakraborty, S. Where Does Indian Medical Education Stand Amidst a Pandemic? J Med Educ Curric Dev; 2020, 7 2382120520951606 Address: Kasturba Medical College, Manipal, Manipal Academy of Higher Education, Karnataka, India. Department of Physical Medicine and Rehabilitation, Christian Medical College and Hospital, Vellore, Tamil Nadu, India.</p> <p>The recent outbreak of COVID-19, declared a pandemic, has affected medical education globally. The scenario is no different for medical students in India as they find themselves at a crossroads in their careers, with clinical and elective postings called off. Missing out on the opportunity to learn from "first-hand" clinical observation stands to threaten the quality of medical education and learning procured by Indian medical students which is extremely essential to deal with the vast patient load that awaits them in their impending future as healthcare professionals. Is the Indian medical education system being able to cope with the challenges imposed by the increasing burden of COVID-19? The authors propose few administrative and on-ground interventions that must seek to work collectively with all government and private medical institutions in order to help students/interns and residents in coping with stress, anxiety or academic losses</p>	INT	JUL TO DEC	Physical Medicine and Rehabilitation	<p>PMID: 32923671 PMC:7453450</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	incurred due to the pandemic.				
460.	<p>Patloori, S. C. S., Lahiri, A., Kapa, S., Chase, D. and Roshan, J. Incessant tachycardia after successful ablation of an atriofascicular pathway Europace; 2020, 22 (1): 83-83</p> <p>Address: [Patloori, Sirish C. Srinath; Lahiri, Anandaroop; Chase, David; Roshan, John] Christian Med Coll & Hosp, Dept Cardiac Electrophysiol & Pacing, Vellore, Tamil Nadu, India. [Kapa, Suraj] Mayo Clin, Div Cardiovasc Dis, Dept Med, Rochester, MN USA. Patloori, SCS (reprint author), Christian Med Coll & Hosp, Dept Cardiac Electrophysiol & Pacing, Vellore, Tamil Nadu, India. sirishchandrasrinath@gmail.com</p>	INT	JAN TO JUN	Cardiac Electrophysiology & Pacing	<p>WOS:000520499500012 SCOPUS H-INDEX:99 IF: 6.100 BIOXBIO (2018/2019)</p>
461.	<p>Patloori, S. C. S., Manickavasagam, A., Chase, D. and Roshan, J. Prognostic significance of accelerated ventricular response during radiofrequency ablation of premature ventricular complexes Indian Pacing Electrophysiol J; 2020, 20 (6): 231-236</p> <p>Address: Unit of Cardiac Electrophysiology and Pacing, Department of Cardiology, Christian Medical College, Vellore, India. Unit of Cardiac Electrophysiology and Pacing, Department of Cardiology, Christian Medical College, Vellore, India. Electronic Address: john@cmcvellore.ac.in.</p> <p>BACKGROUND: Accelerated ventricular response is frequently observed during radiofrequency ablation (RFA) of premature ventricular complexes (PVCs). We hypothesized that acceleration indicates an appropriate site and adequate injury to the arrhythmogenic tissue, and sought to investigate its value in predicting the outcome. METHODS: We retrospectively analyzed RFA procedures performed for PVCs in our institution from 2011 to 2019. RESULTS: Fifty-eight patients (29 male; age 42.7 ± 15.6 years) underwent 62 RFA procedures. The most common site was the right ventricular outflow tract (67.7%). Acute success was seen in 88.7%. Accelerated ventricular response was observed in 60.0% of the successful procedures. After a median follow-up of 14.0 months (IQR: 6.0-26.6 months), 16 patients had a recurrence. Recurrence was significantly lower in the group with acceleration than in the group without acceleration (12.5% vs. 57.1%; log-rank P < 0.001). The 1-year recurrence rate was 6.5% in the acceleration group and 41.6% in the group without acceleration. On multivariable analysis the adjusted hazard ratio was 0.17 (95% CI, 0.04-0.64; Cox regression P = 0.009). The sensitivity, specificity, positive predictive, and negative predictive values of accelerated response to predict long-term success were 75.7%, 75.0%, 87.5%, and 57.2%, respectively. CONCLUSIONS: The recurrence after PVC ablation is significantly lower when an accelerated response was observed at the successful location during RFA. This can be an additional useful marker of long-term success.</p>	NAT	JAN TO JUN	Cardiac Electrophysiology & Pacing Cardiac Electrophysiology & Pacing	<p>PMID: 32428550 PMC:7691780 SCOPUS H-INDEX:24 IF: 0.320 RESEACHGATE (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
462.	<p>Paul, A. J., Amritanand, R., Margabandhu, P., Karuppusami, R., David, K. S. and Krishnan, V. Composite Grip Strength as a Marker of Outcome in Patients Surgically Treated for Degenerative Cervical Myelopathy Asian Spine J; 2020, Address: Spinal Disorders Surgery Unit, Department of Orthopaedics, Christian Medical College, Vellore, India. Department of Hand Physiotherapy, Christian Medical College, Vellore, India. Department of Biostatistics, Christian Medical College, Vellore, India. STUDY DESIGN: Retrospective case series. PURPOSE: This study aimed to examine the efficacy of composite grip strength as a marker of surgical outcome in patients with moderate to severe degenerative cervical myelopathy. OVERVIEW OF LITERATURE: Degenerative cervical myelopathy causes loss of dexterity, muscle strength, and sensations in the hand. The impact of surgical management on improvement in composite grip strength has received scant attention. METHODS: This retrospective study was performed on degenerative cervical myelopathy patients with a complete composite grip strength assessment between January 2013 to January 2019. The Biometrics E-link hand kit was used for the assessment. The following parameters were measured: maximum grip strength, sustained grip strength, three-jaw pinch, maximum key pinch, and sustained key pinch. The pre- and postoperative functional status was assessed using the Nurick grade and the modified Japanese Orthopaedic Association (mJOA) score. RESULTS: A total of 40 patients were included in the study. The mean patient age was 51.9 years. The mean preoperative Nurick grade was 3.5 and the mJOA score was 10.9. The anterior approach was used in 25 patients, and the posterior approach was used in 15 patients. Four patients developed complications. Degenerative cervical myelopathy resulted in decreased handgrip and pinch strength as compared to normative Indian data. There was a significant improvement in the postoperative composite grip strength for all five parameters. There was no differential improvement between the anterior and posterior surgical groups. The improvement in the composite grip strength correlated with the improvement in functional scores. CONCLUSIONS: Composite grip strength analysis is an objective method for assessing the impact of degenerative cervical myelopathy on grip strength and monitoring the postoperative improvement. Decompressive surgery resulted in global improvement in all the parameters of composite grip strength.</p>	INT	JUL TO DEC	Spinal Disorders Surgery Unit, Orthopaedics, Hand Physiotherapy, Biostatistics	PMID: 33108846
463.	<p>Paul, A., Bhatia, K. S., Alex, A. G., Thomson, V. S., Mani, T. and Sharathbabu, N. M. Electrocardiographic Predictors of Mortality in Acute Anterior Wall Myocardial Infarction With Right Bundle Branch Block and Right Precordial Q-Waves (qRBBB) Can J Cardiol; 2020, 36 (11): 1764-1769 Address: Department of Cardiology, Christian Medical College Vellore, Tamil Nadu, India. Department of Biostatistics, Christian Medical College Vellore, Tamil Nadu, India. Department of Cardiology, Christian Medical College Vellore, Tamil Nadu, India. Electronic Address: nmsbabu18@yahoo.com.</p>	INT	JUL TO DEC	Cardiology, Biostatistics	PMID: 32610093

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>BACKGROUND: Published data on the clinical, electrocardiographic, and angiographic profile of acute anterior-wall ST-elevation myocardial infarction (STEMI) with right bundle branch block with q in leads V1, V2 (qRBBB) are scarce. The aim of this study was to estimate the incidence of short-term mortality and in-hospital complications in acute qRBBB STEMI and identify the electrocardiographic (ECG) predictors of a poor outcome. METHODS: We conducted a single-centre retrospective study among the patients with acute anterior-wall STEMI and qRBBB pattern on ECG. All relevant clinical and treatment data were collected from the electronic medical records. All the ECGs taken during the index hospitalization were subjected to detailed analysis. RESULTS: Among the 272 qRBBB patients included in the study, 64% had thrombolysis in myocardial infarction (TIMI) risk score of ≥ 6, and 41% were in Killip class III or IV at the time of presentation. The in-hospital mortality rate was 42.6%. There was a high incidence of ventricular tachyarrhythmias (12%), complete heart block (13%), heart failure (69%), and cardiogenic shock (52%). Extreme deviation of mean QRS axis to the right (180 to 269 degrees) in the baseline ECG was associated with high in-hospital mortality (odds ratio: 13.43; 95% confidence interval: 1.48-122.03; $P = 0.021$). CONCLUSIONS: Acute qRBBB myocardial infarction is a sinister form of acute coronary syndrome that entails high in-hospital mortality and morbidity, necessitating early recognition and prompt institution of reperfusion therapy. Extreme deviation of QRS axis to the right (180 to 269 degrees) is a significant electrocardiographic predictor of in-hospital mortality.</p>				
464.	<p>Paul, J., Cherian, K. E., Thomas, N. and Paul, T. V. Hypophosphataemic osteomalacia due to cadmium exposure in the silver industry Occup Med (Lond); 2020, 70 (3): 207-210</p> <p>Address: [Paul, J.; Cherian, K. E.; Thomas, N.; Paul, T., V] Christian Med Coll & Hosp, Dept Endocrinol, Vellore 632004, Tamil Nadu, India. Cherian, KE (reprint author), Christian Med Coll & Hosp, Dept Endocrinol, Vellore 632004, Tamil Nadu, India. kripaec@gmail.com</p> <p>Chronic heavy metal exposure and the health hazards that ensue are important public-health problems. We highlight the occurrence of hypophosphataemic osteomalacia due to chronic cadmium exposure in the silver industry in India. Three silversmiths presented similarly with clinical, biochemical and radiological evidence of hypophosphataemic osteomalacia. Considering their occupation, their blood samples were screened for heavy metals and were found to have toxic levels of cadmium. They were initiated on neutral phosphate and calcitriol. On follow-up, they reported significant reduction in severity of symptoms. It is essential to maintain a high index of suspicion in diagnosing this condition. A thorough knowledge of the occupational background of patients, as well as ambient conditions at the workplace is of utmost importance in contemplating the possibility of such rare occurrences. Moreover, regulatory agencies and policy</p>	INT	JAN TO JUN	Endocrinology	<p>PMID:31974582 WOS:000537527700013 SCOPUS H-INDEX:79 IF: 1.122 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	makers ought to survey the silver industry and ensure that the metals used are within permissible safe limits of exposure.				
465.	Paul, J., Jebasingh, F. K., Kodiatt, T. A. and Gnanamuthu, B. R. Case of functioning thoracic paraganglioma BMJ case reports; 2020, 13 (9): Address: Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore , Tamilnadu, India. Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore , Tamilnadu, India felixjebasingh@cmcvellore.ac.in. Department of General Pathology, Christian Medical College, Vellore , Tamilnadu, India. Department of Cardiothoracic Surgery, Christian Medical College, Vellore , Tamilnadu, India. Functioning thoracic paraganglioma (PGL) is rare in clinical practice. We present a 33-year-old man with this pathology, who came with right-sided chest pain and was found to have a right-sided paravertebral mass. Fine needle aspiration cytology revealed a PGL. Urine normetanephrine was elevated and meta-iodobenzylguanidine scan showed increased tracer uptake in the right hemithorax, suggestive of a functioning neuroendocrine tumour. The patient was subjected to right PGL excision by video-assisted thoracoscopic surgery, after adequate preoperative preparations. The perioperative period was uneventful, except for a transient rise in blood pressure during the surgery. His blood pressure continued to be normal in the postoperative period. In any patient with a paravertebral mass, the possibility of PGL should be kept in mind even if the patient is normotensive. Making a preoperative diagnosis is important, because excision of functioning PGL without adequate preoperative preparation may be detrimental.	INT	JUL TO DEC	Endocrinology, Diabetes and Metabolism, General Pathology, Cardiothoracic Surgery	PMID: 32933912 PMC:7493105
466.	Paul, J., Shetty, S., Cherian, K. E., Kapoor, N., Abraham, D. and Paul, T. V. Impact of curative treatment in symptomatic primary hyperparathyroidism on trabecular bone score, bone mineral density, and bone turnover markers - A prospective study from southern India Journal of Bone and Mineral Research; 2020, 35 54-54 Address: [Paul, Jinson; Shetty, Shrinath; Cherian, Kripa Elizabeth; Kapoor, Nitin; Abraham, Deepak; Paul, Thomas Vizhalil] Christian Med Coll & Hosp, Vellore , Tamil Nadu, India	INT	JUL TO DEC	Endocrinology, Endocrine Surgery	WOS:000593119300144
467.	Paul, P., Priyambada, L., Abraham, A., Manimegalai, B., Paul, T. V., Princy, S., Antonisamy, B., Thomas, N., Yenuberi, H. and Mathews, J. E. Follow-up of offspring and mothers with gestational diabetes treated with metformin or glibenclamide: A randomized controlled trial Int J Gynaecol Obstet; 2020, Address: Department of Pediatrics, Christian Medical College, Vellore , Tamil Nadu, India. Department of Obstetrics and Gynecology, Christian Medical College, Vellore , Tamil Nadu, India. Department of Dietetics, Christian Medical College, Vellore , Tamil Nadu, India. Department of Endocrinology Diabetes and Metabolism, Christian Medical	INT	JUL TO DEC	Pediatrics, Obstetrics and Gynecology, Dietetics, Endocrinology Diabetes and Metabolism, Bio-Statistics	PMID: 32965047

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	College, Vellore, Tamil Nadu, India. Department of Bio-Statistics, Christian Medical College, Vellore , Tamil Nadu, India.				
468.	Peedicayil, J. The Potential Role of Epigenetic Drugs in the Treatment of Anxiety Disorders Neuropsychiatr Dis Treat; 2020, 16 597-606 Address: [Peedicayil, Jacob] Christian Med Coll & Hosp , Dept Pharmacol & Clin Pharmacol, Vellore , Tamil Nadu, India. Peedicayil, J (reprint author), Christian Med Coll & Hosp , Dept Pharmacol & Clin Pharmacol, Vellore , Tamil Nadu, India. jpeedi@cmcvellore.ac.in There is increasing evidence that abnormalities in epigenetic mechanisms of gene expression contribute to the pathogenesis of anxiety disorders (ADs). This article discusses the role of epigenetic mechanisms of gene expression in the pathogenesis of ADs. It also discusses the data so far obtained from preclinical and clinical trials on the use of epigenetic drugs for treating ADs. Most drug trials investigating the use of epigenetic drugs for treating ADs have used histone deacetylase inhibitors (HDACi). HDACi are showing favorable results in both preclinical and clinical drug trials for treating ADs. However, at present the mode of action of HDACi in ADs is not clear. More work needs to be done to elucidate how epigenetic dysregulation contributes to the pathogenesis of ADs. More work also needs to be done on the mode of action of HDACi in alleviating the signs and symptoms of ADs.	INT	JAN TO JUN	Pharmacology and Clinical Pharmacology	PMID:32184601 PMC ID: PMC7060022 WOS:000518186200001 SCOPUS H-INDEX:62 IF: 2.228 BIOXBIO (2018/2019)
469.	Perumal, G., Ramasamy, B., Maya Nandkumar, A., Sivaraman, D., Selvaraj, R. and Doble, M. Bilayered nanostructure coating on AZ31 magnesium alloy implants for the healing of critical-sized rabbit femoral segmental bone defects Nanomedicine : nanotechnology, biology, and medicine; 2020, 102232 Address: a. Department of Biotechnology, Bhupat and Jyoti Mehta School of Biosciences, Indian Institute of Technology Madras, Chennai, India b. Department of Orthopaedics/Centre for Stem Cell Research, Christian Medical College, Vellore , India c. Division of Microbial Technology, Biomedical Technology Wing, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram, India d. Centre for Laboratory Animal Technology and Research, Sathyabama Institute of Science and Technology, Chennai, India e. Bioscience Research Foundation, Chennai, India f. Department of Orthopaedics, Royal Darwin Hospital, Tiwi, Australia	INT	JAN TO JUN	Orthopedics, Centre for Stem Cell Research	SCOPUS H-INDEX:116 IF: 5.570 BIOXBIO (2018/2019)
470.	Perumal, R., Livingston, A., Samuel, S. and Govindaraju, S. K. Meloidosis of the Musculoskeletal System Medical Principles and Practice; 2020, 29 (2): 121-127	INT	JAN TO JUN	Orthopaedics	WOS:000518582500003 SCOPUS H-INDEX:41 IF: 1.103 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Address: [Perumal, Rajamani; Livingston, Abel; Samuel, Sumant; Govindaraju, Santhosh Kumar] Christian Med Coll & Hosp, Dept Orthopaed, Ida Scudder Rd, Vellore 632004, Tamil Nadu, India.</p> <p>Livingston, A (reprint author), Christian Med Coll & Hosp, Dept Orthopaed, Ida Scudder Rd, Vellore 632004, Tamil Nadu, India. livings78@gmail.com</p> <p>Objective: Recent studies indicate that India is an endemic region for Burkholderia pseudomallei infection. We aimed to describe the clinical presentation of B. pseudomallei infection of the musculoskeletal system and summarise the various treatment modalities used in our clinical practice. Subjects and Methods: Patients with confirmed microbiological diagnosis of B. pseudomallei infection involving the musculoskeletal system treated from January 2007 to December 2016 with a minimum follow-up of 1 year were included. A retrospective review of medical records was carried out and patients' demographic data, co-morbidities, clinical presentation, and details of medical and surgical treatment were documented. Results: Of 342 patients diagnosed with B. pseudomallei infection, 37 (9.2%) had musculoskeletal involvement; 26 patients (23 males) followed up for at least a year were included in the study. Four patients (15%) had multisystem involvement and 10 (37%) had multiple musculoskeletal foci of infection; 15 patients (58%) had osteomyelitis, 10 (38%) had septic arthritis with or without osteomyelitis, and 1 patient (4%) presented with only soft tissue abscess. All patients required surgical intervention in addition to medical management. Surgical treatment varied from soft tissue abscess drainage, arthrotomy for septic arthritis, decompression and curettage for osteomyelitis, and/or use of antibiotic (meropenem or ceftazidime)-loaded polymethylmethacrylate bone cement for local drug delivery. At final follow-up (average: 37 months, range: 12-120), all patients were disease free. Conclusion: We found the rate of musculoskeletal involvement in B. pseudomallei infection to be 9.2%. Appropriate surgical treatment in addition to medical management resulted in resolution of disease in all our patients.</p>				
471.	<p>Peter Christudas Valsamma, D., Mani, V., Jose, S. K. and Thomas, M.</p> <p>Exophytic nodule resembling a horn - an unusual presentation of metastatic cutaneous leiomyosarcoma</p> <p>Australas J Dermatol; 2020, Address: Department of Dermatology, Venereology and Leprosy, Christian, Vellore, India.</p> <p>Department of Pathology, Christian Medical College, Vellore, India.</p>	INT	JUL TO DEC	Dermatology, Venereology and Leprosy, Pathology	PMID: 32686093
472.	<p>Peter, J. V.</p> <p>Approach to the Control of Antimicrobial Resistance: Are We Missing the Plot?</p> <p>Indian J Crit Care Med; 2020, 24 (10): 899-900</p> <p>Address: Department of Critical Care, Medical Intensive Care Unit, Christian Medical College Hospital, Vellore, Tamil Nadu, India.</p> <p>How to cite this article: Peter JV. Approach to the Control of Antimicrobial Resistance: Are We Missing the Plot? Indian J Crit Care Med 2020;24(10):899-900.</p>	NAT	JUL TO DEC	Critical Care, Medical Intensive Care Unit	PMID: 33281310 PMC:7689126
473.	<p>Petit, C. P. and Kuruvilla, A.</p>	NAT	JAN TO JUN	Psychiatry	WOS:000540356200544

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Explanatory models during illness and remission in patients with schizophrenia Indian Journal of Psychiatry; 2020, 62 S160-S161</p> <p>Address: [Petit, Cheryl Persis; Kuruvilla, Anju] Christian Med Coll & Hosp, Dept Psychiat, Vellore, Tamil Nadu, India.</p>				<p>H-INDEX:30 IF: 1.500 RG (2018/2019)</p>
474.	<p>Peyvandi, F., Lillicrap, D., Mahlangu, J., Mclintock, C., Pasi, K. J., Pipe, S. W., Scales, W., Srivastava, A. and Vandendriessche, T. Hemophilia gene therapy knowledge and perceptions: Results of an international survey Res Pract Thromb Haemost; 2020, 4 (4): 644-651</p> <p>Address: University of Milan Milan Italy. Queen's University Kingston ON Canada. Faculty of the Health Sciences University of the Witwatersrand and NHLS Johannesburg South Africa. Auckland City Hospital Auckland New Zealand. Barts and the London School of Medicine and Dentistry London UK. University of Michigan Ann Arbor MI USA. The France Foundation Old Lyme CT USA. Christian Medical College Vellore India. Katholieke Universiteit Leuven Vrije University Brussels Brussels Belgium.</p> <p>BACKGROUND: Hemophilia gene therapy is a rapidly evolving therapeutic approach in which a number of programs are approaching clinical development completion. OBJECTIVE: The aim of this study was to evaluate knowledge and perceptions of a variety of health care practitioners and scientists about gene therapy for hemophilia. METHODS: This survey study was conducted February 1 to 18, 2019. Survey participants were members of the ISTH, European Hemophilia Consortium, European Hematology Association, or European Association for Hemophilia and Allied Disorders with valid email contacts. The online survey consisted of 36 questions covering demographic information, perceptions and knowledge of gene therapy for hemophilia, and educational preferences. Survey results were summarized using descriptive statistics. RESULTS: Of the 5117 survey recipients, 201 responded from 55 countries (4% response rate). Most respondents (66%) were physicians, and 59% were physicians directly involved in the care of people with hemophilia. Among physician respondents directly involved in hemophilia care, 35% lacked the ability to explain the science of adeno-associated viral gene therapy for hemophilia, and 40% indicated limited ability or lack of comfort answering patient questions about gene therapy for hemophilia based on clinical trial results to date. Overall, 75% of survey respondents answered 10 single-answer knowledge questions correctly, 13% incorrectly, and 12% were unsure of the correct answers. CONCLUSIONS: This survey highlighted knowledge gaps and educational needs related to gene therapy for hemophilia and, along with</p>	INT	JAN TO JUN	Clinical Hematology	<p>PMID:32548564 PMC ID: PMC7292673 H-INDEX:NA IF: NA</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	other inputs, has informed the development of "Gene Therapy in Hemophilia: An ISTH Education Initiative."				
475.	Philip Sridhar, R. and Mittal, R. A stepwise approach to Delorme's procedure for rectal prolapse - a video vignette Colorectal Dis; 2020, 22 (11): 1770 Address: Department of Colorectal Surgery, Christian Medical College, Vellore, India.	INT	JAN TO JUN	Colorectal Surgery	PMID:32470209 WOS:000590679000052 SCOPUS H-INDEX:84 IF: 2.997 BIOXBIO (2018/2019)
476.	Philip Sridhar, R. and Mittal, R. Transperineal excision of a retrorectal mass - a video vignette Colorectal Disease; 2020, 22 (12):2354 Address: Department of Colorectal Surgery, Christian Medical College, Vellore, India.	INT	JUL TO DEC	Colorectal Surgery	PMID: 32881230
477.	Philip Sridhar, R., Coelho, V. V., Roopavathana, B. and Chase, S. Opportunistic penicilliosis infection causing intestinal obstruction in people living with HIV complicating antiretroviral therapy BMJ Case Rep; 2020, 13 (2): Address: General Surgery, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. General Surgery, Christian Medical College and Hospital, Vellore, Tamil Nadu, India beulahroopavathana@gmail.com . We report a retroviral positive patient who presented to us with recurrent skin lesions along with intermittent, colicky periumbilical abdominal pain associated with non-projectile, postprandial vomiting. Contrast-enhanced CT (CECT) of abdomen and pelvis was suggestive of proximal jejunal obstruction. Double balloon enteroscopy done which showed extensive deep ulceration with surrounding nodular surface and friable mucosa at 60 cm from pylorus with luminal narrowing. The biopsy from this region as well as the skin lesion on the forehead grew <i>Talaromyces marneffeii</i> She was initially treated with liposomal amphotericin B for 2 weeks following which she received itraconazole for 3 weeks for disseminated talaromycosis infection. She had already been started on antiretroviral therapy (ART) 1 year back however her cluster of differentiation 4 (CD4) counts did not show any improvement. Proximal bowel obstruction leading to poor nutritional status compounded with ineffective ART therapy due to suboptimal absorption, dictated the staged management of her condition. Feeding jejunostomy was done with a plan to offer her resection and anastomosis of affected jejunal segment, should she require one, after optimising her nutritional and immunological status.	INT	JAN TO JUN	General Surgery	PMID:32060105 PMC ID: PMC7046417 SCOPUS H-INDEX:22 IF: 0.440 BIOXBIO (2018/2019)
478.	Philip Sridhar, R., Varghese, G., John, R. A. and Ranjan Jesudason, M. An operative guide to laparoscopic dissection for total pelvic exenteration in a man with rectal cancer infiltrating the prostate and seminal vesicles - A video vignette Colorectal Dis; 2020, Address: Department of Colorectal Surgery, Christian Medical College, Vellore, India. Department of Radiology, Christian Medical College, Vellore, India.	INT	JUL TO DEC	Colorectal Surgery, Radiology	PMID: 33338324

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
479.	<p>Pierce, G. F., Pasi, K. J., Coffin, D., Kaczmarek, R., Lillicrap, D., Mahlangu, J., Rottellini, D., Sanni, T., Srivastava, A., Vandendriessche, T., Weill, A. and Table, W. F. H. Gene Therapy Round</p> <p>Towards a global multidisciplinary consensus framework on haemophilia gene therapy: Report of the 2nd World Federation of Haemophilia Gene Therapy Round Table</p> <p>Haemophilia; 2020, 26 (3): 443-449</p> <p>Address: [Pierce, Glenn F.; Coffin, Donna; Weill, Alain] World Federat Hemophilia, 1425 Blvd Rene Levesque Ouest,Suite 1200, Montreal, PQ H3G 1T7, Canada. [Pasi, K. John] Barts & London Queen Marys Sch Med & Dent, Royal London Haemophilia Ctr, London, England. [Kaczmarek, Radoslaw] Indiana Univ Sch Med, Dept Pediat, Indianapolis, IN 46202 USA. [Kaczmarek, Radoslaw] Hirszfeld Inst Immunol & Expt Therapy, Lab Glycobiol, Wroclaw, Poland. [Lillicrap, David] Queens Univ, Dept Pathol & Mol Med, Kingston, ON, Canada. [Mahlangu, Johnny] Univ Witwatersrand, Haemophilia Comprehens Care Ctr, NHLs, Johannesburg, South Africa. [Mahlangu, Johnny] Univ Witwatersrand, Charlotte Maxeke Johannesburg Acad Hosp, Johannesburg, South Africa. [Rottellini, Dawn] Natl Hemophilia Fdn, New York, NY USA. [Sannie, Thomas] French Haemophilia Assoc AFH, Paris, France. [Srivastava, Alok] Christian Med Coll Vellore, Dept Haematol, Vellore, Tamil Nadu, India. [VandenDriessche, Thierry] Vrije Univ Brussel VUB, Dept Gene Therapy & Regenerat Med, Brussels, Belgium. [VandenDriessche, Thierry] Univ Leuven, Ctr Mol & Vasc Biol, Dept Cardiovasc Sci, Leuven, Belgium.</p> <p>Coffin, D (reprint author), World Federat Hemophilia, 1425 Blvd Rene Levesque Ouest,Suite 1200, Montreal, PQ H3G 1T7, Canada. dcoffin@wfh.org</p> <p>Introduction With approval of gene therapy for haemophilia likely in the near future, policy frameworks are needed to guide the path forward for this disruptive and novel therapeutic advance. Aim The WFH has initiated a series of multi-stakeholder Gene Therapy Round Tables (GTRT) to better understand where guidance is needed and develop initial consensus statements to inform policy. Methods The first day of the 2nd GTRT was devoted to didactic presentations on models of access to gene therapy, payment and health technology assessment considerations, regulatory issues and the generation of evidence on safety and durable efficacy of gene therapy products. On the second day, participants were tasked with developing and voting on consensus statements that reflected the information presented and multi-stakeholder views expressed during discussions in the 1st and 2nd WFH GTRTs. The statements covered global access to gene therapy for all people with haemophilia (PWH), collection of long-term safety and efficacy data, ensuring gene therapy is available for all subgroups of PWH including those who have been largely excluded from clinical trials and characterizing acceptable and ideal factor expression levels for gene therapy products. Results The first 3 statements achieved consensus (at least 80% agreement) by this group</p>	INT	JAN TO JUN	Clinical Hematology	<p>WOS:000535774900026</p> <p>SCOPUS</p> <p>H-INDEX:88</p> <p>IF: 3.590 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	of experts. The statement on identifying an ideal and an acceptable factor level expression elicited a lively discussion but failed to achieve consensus by this group. Conclusions This issue of ideal and acceptable factor level expression and other unresolved issues will be brought to the 3rd WFH GTRT in 2020.				
480.	<p>Pokharel, A., Naina, P., Sebastain, S., Syed, K. A., John, M. and Varghese, A. M. Normative nasalance scores in Tamil-speaking Indian children Logoped Phoniatr Vocol; 2020, 1-6 Address: Department of ENT, Christian Medical College, Vellore, India. OBJECTIVE: The aim of this study was to obtain normative nasalance scores for Indian Tamil-speaking children. METHODS: Mean nasalance scores were obtained from 175 consecutive Tamil-speaking normal children (95 males, 80 females) aged 5-16 years during the repetition of six standardized sentences: two oral, two oronasal, and two nasal sentences. The nasal view was used to obtain nasalance scores for the standardized sentences. RESULTS: Group mean and standard deviation (SD) nasalance scores of children for oral, oronasal, and nasal sentence were 35.65(SD 7.20), 44.42(SD 7.37), and 57.21(SD 8.15), respectively. The mean nasalance values of children aged 9-12 years were greater than children aged 5-8 years and 13-16 years for nasal sentences ($p < .001$). Males were found to have significantly higher nasalance scores for oral and oronasal sentences ($p < .05$) although these differences were within the range of normal variation. CONCLUSIONS: The present study provides normative nasalance scores for Tamil-speaking Indian children.</p>	INT	JUL TO DEC	ENT	PMID:33269640 WOS:000596289400001
481.	<p>Pollard, A. J., Sauerwein, R., Baay, M., Neels, P., Balasingam, S., Bejon, P., Berthels, N., Bull, S., Catchpole, A., Chi, P. C., Chilengi, R., Cox, R., Davies, H., Durbin, A., Emary, K., Emerson, C., Frenck, R., Grimwade, O., Hobbs, M., Kang, G., Kaye, P., Le Doare, K., Levine, M. M., Mcshane, H., Oguti, B., Openshaw, P., Osowicki, J., Parker, M., Ploin, D., Porter, C., Roestenberg, M., Selgelid, M. J. and Wildfire, A. Third human challenge trial conference, Oxford, United Kingdom, February 6-7, 2020, a meeting report Biologicals; 2020, Address: Department of Paediatrics, University of Oxford, United Kingdom Radboud University Medical Center, Netherlands P95 Epidemiology & Pharmacovigilance, Leuven, Belgium International Alliance for Biological Standardization, Belgium Wellcome Trust, United Kingdom KEMRI-Wellcome, Kilifi County Hospital, Kenya Federal Agency for Medicines and Health Products (FAMHP), Belgium University of Oxford, United Kingdom hVIVO, United Kingdom KEMRI-Wellcome Trust Research Programme, Kenya Centre for Infectious Disease Research in Zambia, Roma, Zambia University of Bergen, Norway Johns Hopkins Bloomberg School of Public Health, United States</p>	INT	JAN TO JUN	Wellcome Research Unit	SCOPUS H-INDEX:53 IF: 1.960 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>McMaster University, Canada University of Cincinnati, United States Monash University, Australia University of North Carolina, United States Christian Medical College, Vellore, India University of York, United Kingdom St. George's, University of London, United Kingdom and mrc/uvri @lshtm, Uganda University of Maryland School of Medicine, United States Imperial College, United Kingdom Murdoch Children's Research Institute (MCRI), Australia Hospices Civils de Lyon, France Naval Medical Research Center, United States Leiden University Medical Center, Netherlands SGS Life Sciences, Belgium</p> <p>The third Human Challenge Trial Meeting brought together a broad range of international stakeholders, including academia, regulators, funders and industry, with a considerable delegation from Low- and Middle-Income Countries. Controlled human infection models (CHIMs) can be helpful to study pathogenesis and for the development of vaccines. As challenge agents are used to infect healthy volunteers, ethical considerations include that the challenge studies need to be safe and results should be meaningful. The meeting provided a state-of-the-art overview on a wide range of CHIMs, including viral, bacterial and parasitic challenge agents. Recommendations included globally aligned guidance documents for CHIM studies; further definition of a CHIM, based on the challenge agent used; standardization of methodology and study endpoints; capacity building in Low- and Middle-Income Countries, in performance as well as regulation of CHIM studies; guidance on compensation for participation in CHIM studies; and preparation of CHIM studies, with strong engagement with stakeholders. © 2020</p>				
482.	<p>Prabakumar, A. T., Thamizhselvi, G., Tabasum, A., Murugesan, M., Spencer, H. T., Ryan, B., Srivastava, A., Abraham, A. and Martin, S. Expansion of human gamma 9 delta 2 T cells to target hematologic malignancies Cytotherapy; 2020, 22 (5): S130-S130</p> <p>Address: [Prabakumar, A. T.; Thamizhselvi, G.; Tabasum, A.; Murugesan, M.; Srivastava, A.; Abraham, A.; Martin, S.] Ctr Stem Cell Res, Vellore, Tamil Nadu, India. [Spencer, H. T.; Ryan, B.] Emory Univ, Pediat, Atlanta, GA 30322 USA. [Srivastava, A.; Abraham, A.] Christian Med Coll & Hosp, Haematol, Vellore, Tamil Nadu, India.</p>	INT	JAN TO JUN	Clinical Hematology	<p>WOS:000536174900287 H-INDEX:81 IF: 4.297 BIOXBIO (2018/2019)</p>
483.	<p>Prabhakar, A., Sivadasan, A., Shaikh, A., Aaron, S., Benjamin, R., Mani, A. M. and Mathew, V. Network Localization of Central Hypoventilation Syndrome in Lateral Medullary Infarction J Neuroimaging; 2020, 30 (6): 875-881</p>	INT	JUL TO DEC	Neurological Sciences	<p>PMID: 33405315</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Address: Department of Neurological Sciences, Christian Medical College, Vellore, India.</p> <p>BACKGROUND AND PURPOSE: The brainstem plays a key role in the control of respiration. Strokes involving the lateral medulla can rarely produce a central hypoventilation syndrome (CHS) characterized by loss of automatic respiration called Ondine's curse. In this study, we investigated the neuroanatomical correlates of CHS in patients with lateral medullary infarction (LMI). METHODS: Cases of CHS following LMI were identified from searching our medical records and literature. Voxel-based lesion-symptom mapping and lesion network-symptom-mapping (LNSM) analysis was performed to identify the regions connected to the lesion sites based on normative functional connectome data. RESULTS: Sixteen patients with CHS and 32 controls were included. The ventro-lateral region of the rostral medulla showed a significant association with CHS. LNSM analysis showed connections of this region to the rostral ventro-lateral medulla and caudal pons. CONCLUSIONS: In patients with LMI, disruption of the respiratory control network, at the level of ventro-lateral region of the rostral medulla, could result in CHS.</p>				
484.	<p>Prabhash, K., Babu, G., Chaturvedi, P., Kuriakose, M., Birur, P., Anand, A. K., Kaushal, A., Mahajan, A., Syiemlieh, J., Singhal, M., Gairola, M., Ramachandra, P., Goyal, S., John, S., Nayyar, R., Patil, V. M., Rao, V. H., Roshan, V. and Rath, G. K.</p> <p>Indian clinical practice consensus guidelines for the management of squamous cell carcinoma of head and neck Indian Journal of Cancer; 2020, 57 (5): 1-5</p> <p>Address: [Prabhash, Kumar] Tata Mem Hosp, Dept Med Oncol, Mumbai, Maharashtra, India. [Babu, Govind] Kidwai Mem Inst Oncol, Dept Med Oncol, Bangalore, Karnataka, India. [Chaturvedi, Pankaj] Tata Mem Hosp, Dept Surg Oncol, Mumbai, Maharashtra, India. [Kuriakose, Moni] Cochin Canc Res Ctr, Dept Surg Oncol, Cochin, Kerala, India. [Birur, Praveen] KLE Soc Inst Dent Sci KLESIDS, Dept Oral Med & Radiol, Bangalore, Karnataka, India. [Anand, Anil K.] Max Super Special Hosp, Dept Radiat Oncol, New Delhi, India. [Kaushal, Ashish] HCG Canc Ctr, Dept Med Oncol, Ahmadabad, Gujarat, India. [Mahajan, Abhishek] Tata Mem Hosp, Dept Radiodiag & Imaging, Mumbai, Maharashtra, India. [Syiemlieh, Judita] Civil Hosp, Dept Radiat Oncol, Shillong, Meghalaya, India. [Singhal, Manish] Indraprastha Apollo Hosp, Dept Med Oncol, New Delhi, India. [Gairola, Munish] Rajiv Gandhi Canc Inst & Res Ctr, Dept Radiation Oncol, New Delhi, India. [Ramachandra, Prakash] Sri Shankara Canc Hosp & Res Ctr, Dept Radiat Oncol, Bangalore, Karnataka, India. [Goyal, Sumit] Rajiv Gandhi Canc Inst & Res Ctr, Dept Med Oncol, New Delhi, India. [John, Subashini] Christian Med Coll & Hosp, Dept Radiotherapy, Vellore, Tamil Nadu, India. [Nayyar, Rohit] Max Super Special Hosp, Dept Surg Oncol, New Delhi, India. [Rao, Vishal] HCG Canc Ctr, Dept Surg Oncol, Bangalore, Karnataka, India. [Roshan, Vikas] Shri Mata Vaishno Devi Narayana Superspecial Hosp, Dept Radiat Oncol, Jammu, Jammu & Kashmir, India. [Rath, G. K.] All India Inst Med Sci, Dept Radiat Oncol, Natl Canc Inst, Delhi, India. Prabhash, K (reprint author), Tata Mem</p>	NAT	JAN TO JUN	Radiotherapy	<p>WOS:000518668700001 SCOPUS H-INDEX:36 IF: 0.429 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Hosp, Dept Med Oncol, Mumbai, Maharashtra, India. kprabhash1@gmail.com</p> <p>Head and neck cancers (HNCs) are malignant tumors of the upper aerodigestive tract and are the sixth most common cancer worldwide. In India, around 30-40% of all cancers are HNCs. Even though there are global guidelines or recommendations for the management of HNCs, these may not be appropriate for Indian scenarios. In an effort to discuss current practices, latest developments and to come to a consensus to recommend management strategies for different anatomical subsites of HNCs for Indian patients, a group of experts (medical, surgical and radiation oncologists and dentists) was formed. A review of literature from medical databases was conducted to provide the best possible evidence base, which was reviewed by experts during a consensus group meeting (January, 2019) to provide recommendations.</p>				
485.	<p>Prabhash, K., Babu, G., Chaturvedi, P., Kuriakose, M., Birur, P., Anand, A. K., Kaushal, A., Mahajan, A., Syiemlieh, J., Singhal, M., Gairola, M., Ramachandra, P., Goyal, S., John, S., Nayyar, R., Patil, V. M., Rao, V. H., Roshan, V. and Rath, G. K.</p> <p>Indian clinical practice consensus guidelines for the management of oropharyngeal cancer Indian Journal of Cancer; 2020, 57 (5): 12-15</p> <p>Address: [Prabhash, Kumar] Tata Mem Hosp, Dept Med Oncol, Mumbai, Maharashtra, India. [Babu, Govind] Kidwai Mem Inst Oncol, Dept Med Oncol, Bangalore, Karnataka, India. [Chaturvedi, Pankaj] Tata Mem Hosp, Dept Surg Oncol, Mumbai, Maharashtra, India. [Kuriakose, Moni] Cochin Canc Res Ctr, Dept Surg Oncol, Cochin, Kerala, India. [Birur, Praveen] KLESIDS, Dept Oral Med & Radiol, Bangalore, Karnataka, India. [Anand, Anil K.] Max Super Special Hosp, Dept Radiat Oncol, New Delhi, India. [Kaushal, Ashish] HCG Canc Ctr, Dept Med Oncol, Ahmadabad, Gujarat, India. [Mahajan, Abhishek] Tata Mem Hosp, Dept Radiodiag & Imaging, Mumbai, Maharashtra, India. [Syiemlieh, Judita] Civil Hosp, Dept Radiat Oncol, Shillong, Meghalaya, India. [Singhal, Manish] Indraprastha Apollo Hosp, Dept Med Oncol, New Delhi, India. [Gairola, Munish] Rajiv Gandhi Canc Inst & Res Ctr, Dept Radiat Oncol, New Delhi, India. [Ramachandra, Prakash] Sri Shankara Canc Hosp & Res Ctr, Dept Radiat Oncol, Bangalore, Karnataka, India. [Goyal, Sumit] Rajiv Gandhi Canc Inst & Res Ctr, Dept Med Oncol, New Delhi, India. [John, Subashini] Christian Med Coll & Hosp, Dept Radiotherapy, Vellore, Tamil Nadu, India. [Nayyar, Rohit] Max Super Special Hosp, Dept Surg Oncol, New Delhi, India. [Rao, Vishal] HCG Canc Ctr, Dept Surg Oncol, Bangalore, Karnataka, India. [Roshan, Vikas] Shri Mata Vaishno Devi Narayana Superspecial Hosp, Dept Radiat Oncol, Jammu, Jammu & Kashmir, India. [Rath, G. K.] All India Inst Med Sci, Natl Canc Inst, Dept Radiat Oncol, Delhi, India. Prabhash, K (reprint author), Tata Mem Hosp, Dept Med Oncol, Mumbai, Maharashtra, India. kprabhash1@gmail.com</p>	NAT	JAN TO JUN	Radiotherapy	<p>WOS:000518668700004 SCOPUS H-INDEX:36 IF: 0.429 BIOXBIO (2018/2019)</p>
486.	<p>Prabhash, K., Babu, G., Chaturvedi, P., Kuriakose, M., Birur, P., Anand, A. K., Kaushal, A., Mahajan, A., Syiemlieh, J., Singhal, M., Gairola, M., Ramachandra, P., Goyal, S.,</p>	NAT	JAN TO JUN	Radiotherapy	<p>WOS:000518668700007 SCOPUS</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>John, S., Nayyar, R., Patil, V. M., Rao, V. H., Roshan, V. and Rath, G. K. Indian clinical practice consensus guidelines for the management of very advanced disease of squamous cell carcinoma of head and neck Indian journal of cancer; 2020, 57 S22-S25</p> <p>Address: [Prabhash, Kumar; Patil, Vijay M.] Tata Mem Hosp, Dept Med Oncol, Mumbai, Maharashtra, India. [Babu, Govind] Kidwai Mem Inst Oncol, Dept Med Oncol, Bangalore, Karnataka, India. [Chaturvedi, Pankaj] Tata Mem Hosp, Dept Surg Oncol, Mumbai, Maharashtra, India. [Kuriakose, Moni] Cochin Canc Res Ctr, Dept Surg Oncol, Cochin, Kerala, India. [Birur, Praveen] KLESIDS, Dept Oral Med & Radiol, Bangalore, Karnataka, India. [Anand, Anil K.] Max Super Special Hosp, Dept Radiat Oncol, New Delhi, India. [Kaushal, Ashish] HCG Canc Ctr, Dept Med Oncol, Ahmadabad, Gujarat, India. [Mahajan, Abhishek] Tata Mem Hosp, Dept Radiodiagnosis & Imaging, Mumbai, Maharashtra, India. [Syiemlieh, Judita] Civil Hosp, Dept Radiat Oncol, Shillong, Meghalaya, India. [Singhal, Manish] Indraprastha Apollo Hosp, Dept Med Oncol, New Delhi, India. [Gairola, Munish] Rajiv Gandhi Canc Inst & Res Ctr, Dept Radiat Oncol, New Delhi, India. [Ramachandra, Prakash] Sri Shankara Canc Hosp & Res Ctr, Dept Radiat Oncol, Bangalore, Karnataka, India. [Goyal, Sumit] Rajiv Gandhi Canc Inst & Res Ctr, Dept Med Oncol, New Delhi, India. [John, Subashini] Christian Med Coll & Hosp, Dept Radiotherapy, Vellore, Tamil Nadu, India. [Nayyar, Rohit] Max Super Special Hosp, Dept Surg Oncol, New Delhi, India. [Rao, Vishal] HCG Canc Ctr, Dept Surg Oncol, Bangalore, Karnataka, India. [Roshan, Vikas] Shri Mata Vaishno Devi Narayana Superspecial Hosp, Dept Radiat Oncol, Jammu, Jammu & Kashmir, India. [Rath, G. K.] All India Inst Med Sci, Natl Canc Inst, Dept Radiat Oncol, Delhi, India. Prabhash, K (reprint author), Tata Mem Hosp, Dept Med Oncol, Mumbai, Maharashtra, India. kprabhash1@gmail.com</p>				<p>H-INDEX:36 IF: 0.429 BIOXBIO (2018/2019)</p>
487.	<p>Pradeep, P. V., Dorairajan, N. and Siddharth, D. Vignette Adrenal Gland: Brief Look Into Its History Indian Journal of Surgery; 2020, Address: Department of Endocrine Surgery, Baby Memorial Hospital, Kozhikode, Kerala, India The Tamil Nadu DR MGR Medical University, Chennai, India Madras Medical College, Chennai, India Apollo Hospital, Chennai, India Christian Medical College, Vellore, India</p> <p>The adrenal gland function is as interesting as its historical past. This study is aimed at collecting the available data on the discovery of the adrenal gland and its functions. The study also looks at the milestones during the understanding of the adrenal gland function and evolution of adrenal surgery. As the knowledge on the functions of different parts of the adrenal gland improved diseases, like Cushing's syndrome, hyperaldosteronism and pheochromocytoma could be managed more effectively with lesser mortality and morbidity. The adrenal surgery also evolved</p>	NAT	JAN TO JUN	Orthopedics	<p>SCOPUS H-INDEX:19 IF: 0.550 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	over the years, and now laparoscopic adrenalectomy has become a gold standard procedure. © 2020, Association of Surgeons of India.				
488.	<p>Pragasam, A. K., Jennifer, S. L., Solaimalai, D., Muthuirulandi Sethuvel, D. P., Rachel, T., Elangovan, D., Vasudevan, K., Gunasekaran, K. and Veeraraghavan, B.</p> <p>Expected plazomicin susceptibility in India based on the prevailing aminoglycoside resistance mechanisms in Gram-negative organisms derived from whole-genome sequencing</p> <p>Indian J Med Microbiol; 2020, 38 (3 & 4): 313-318</p> <p>Address: Department of Clinical Microbiology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Department of General Medicine (Unit.V), Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND: Aminoglycoside resistance is a growing challenge, and it is commonly mediated by the aminoglycoside-modifying enzymes (AMEs), followed by 16S rRNA methyl transferase. Plazomicin, a novel aminoglycoside agent approved by the Food and Drug Administration for complicated urinary tract infections is proven to overcome resistance mediated by AMEs but not due to 16S rRNA methyl transferase (16SRMTases). We undertook this study to predict the efficacy of plazomicin in India based on the antimicrobial resistance profile derived from whole-genome sequencing (WGS). METHODOLOGY: A total of 386 clinical isolates of Escherichia coli, Klebsiella pneumoniae and Acinetobacter baumannii subjected to WGS were screened for aminoglycoside-resistance mechanisms such as AMEs and 16SRMTases and its association with carbapenemases. RESULTS: AMEs was present in all E. coli, A. baumannii and in 90% of K. pneumoniae. In addition, up to 47% of E. coli and 38% of K. pneumoniae co-carried 16SRMTases with AMEs genes. However, A. baumannii showed 87% of isolates co-harboring 16SRMTase. bla NDM, bla Oxa-48-like and bla Oxa-23-like were the most predominant carbapenemases in E. coli, K. pneumoniae and A. baumannii, respectively. Notably, 48% of NDM-producing E. coli and 35% of Oxa-48-like producing K. pneumoniae were identified to co-harbour AMEs + RMTases, where plazomicin may not be useful. CONCLUSION: Overall, 53%, 62% and 14% of carbapenemase-producing E. coli, K. pneumoniae and A. baumannii harbours only AMEs, indicating the role of plazomicin use. Plazomicin can be used both for ESBLs as "carbapenem-sparing agent" and carbapenemase producers as "colistin-sparing agent." For optimal use, it is essential to know the molecular epidemiology of resistance in a given geographical region where plazomicin empirical therapy is considered.</p>	NAT	JUL TO DEC	Clinical Microbiology, General Medicine (Unit.V)	<p>PMID: 33154241</p> <p>WOS:000594373000011</p>
489.	<p>Pragasam, A. K., Pickard, D., Wong, V., Dougan, G., Kang, G., Thompson, A., John, J., Balaji, V. and Mutreja, A.</p> <p>Phylogenetic Analysis Indicates a Longer Term Presence of the Globally Distributed H58 Haplotype of Salmonella Typhi in Southern India</p> <p>Clinical Infectious Diseases; 2020, 71 (8): 1856-1863</p> <p>Address: [Pragasam, Agila Kumari; Kang, Gagandeep; John, Jacob; Balaji,</p>	INT	JUL TO DEC	Clinical Microbiology	WOS:000593006800029

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Veeraraghavan] Christian Med Coll & Hosp, Dept Clin Microbiol, Vellore, Tamil Nadu, India. [Pragasam, Agila Kumari; Pickard, Derek; Wong, Vanessa; Dougan, Gordon; Thompson, Andrew; Mutreja, Ankur] Univ Cambridge, Dept Med, Cambridge, England. [Dougan, Gordon; Mutreja, Ankur] Wellcome Sanger Inst, Hinxton, England.</p> <p>Mutreja, A (corresponding author), Univ Cambridge, Dept Med, Cambridge, England.; Mutreja, A (corresponding author), Wellcome Sanger Inst, Hinxton, England. am872@medschl.cam.ac.uk</p> <p>Background. Typhoid fever caused by Salmonella Typhi is a major public health concern in low-/middle-income countries. A recent study of 1900 global S. Typhi indicated that South Asia might be the site of the original emergence of the most successful and hypervirulent clone belonging to the 4.3.1 genotype. However, this study had limited samples from India. Methods. We analyzed 194 clinical S. Typhi, temporal representatives from those isolated from blood and bone marrow cultures in southern India, over 26 years (1991-2016). Antimicrobial resistance (AMR) testing was performed for most common clinical agents. Whole-genome sequencing and SNP-level analysis was conducted. Comparative genomics of Vellore isolates was performed to infer transmission and AMR events. Results. We identified multidrug-resistance (MDR)-associated Glade 4.3.1 as the dominant genotype. We detected 4.3.1 S. Typhi as early as 1991, the earliest to be reported from India, and the majority were fluoroquinolone resistant and not MDR. MDR was not detected at all in other genotypes circulating in Vellore. Comparison with global S. Typhi showed 2 Vellore subgroups (I and II) that were phylogenetically highly related to previously described South Asia (subgroup I, II) and Southeast Asia (subgroup II) clades. Conclusions. 4.3.1 S. Typhi has dominated in Vellore for 2 decades. Our study would assist public health agencies in better tracking of transmission and persistence of this successful Glade in India and globally. It informs clinicians of the AMR pattern of circulating clone, which would add confidence to their prophylactic/treatment decision making and facilitate efficient patient care.</p>				
490.	<p>Premkumar, M., Chiramel, G. K. and Keshava, S. N. Retrieval of retained pigtail in the liver Indian J Radiol Imaging; 2020, 30 (3): 376-378 Address: Department of Radiology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>The incidence of catheter breakage during percutaneous image-guided treatment of liver hydatid is very rare. A "telescoping" technique was used to retrieve the broken pigtail in this case report. Alternative options for pigtail retrieval are briefly discussed.</p>	NAT	JUL TO DEC	Radiology	PMID: 33273773 PMC:7694720
491.	<p>Radha, S., Murugesan, M. and Rupali, P. Drug resistance in Salmonella Typhi: implications for South Asia and travel Curr Opin Infect Dis; 2020, 33 (5): 347-354</p>	INT	JUL TO DEC	Infectious Diseases, Microbiology	PMID: 32773502

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Address: Department of Infectious Diseases. Department of Microbiology. Department of Infectious Diseases, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>PURPOSE OF REVIEW: Recent attempts at mapping Typhoid epidemiology have revealed an enormous burden of disease in developing countries. Countries hitherto believed to have a low incidence, such as the African subcontinent, on accurate mapping were found to have a significant burden of disease. Drug resistance, because of rampant overuse of antibiotics, has driven selection pressure to extensively drug-resistant typhoid becoming a reality in the Indian subcontinent. With widespread travel, importation of this variety of typhoid to nonendemic countries is likely to lead to outbreaks in a nonimmune population. RECENT FINDINGS: A strain of extensively drug-resistant Salmonella Typhi isolated in Pakistan in 2016 has been responsible for multiple outbreaks in Pakistan and multiple travel-related cases all over the world in United States, UK, and Australia. This novel strain belongs to H58 lineage harbouring a plasmid encoding additional resistance elements like blaCTX-M-15 and a qnrS fluoroquinolone resistance gene. This resistance pattern has rendered many therapeutic options like Ceftriaxone and Fluoroquinolones clinically inactive impacting care in endemic and traveller populations alike. SUMMARY: Changing epidemiology and drug resistance in typhoid indicates that it may be prudent to vaccinate nonimmune travellers travelling to typhoid endemic areas, especially the Indian subcontinent.</p>				
492.	<p>Radhakrishnan, R. C., Varughese, S., Chandran, A., Jacob, S., David, V. G., Alexander, S., Mohapatra, A., Valson, A. T., Gopal, B., Palani, C., Jose, A., Antonisamy, B. and Tamilarasi, V.</p> <p>Effects of Individualized Dialysate Sodium Prescription in Hemodialysis - Results from a Prospective Interventional Trial Indian J Nephrol; 2020, 30 (1): 3-7</p> <p>Address: Department of Nephrology, Christian Medical College, (Current Affiliation: Department of Pediatric Nephrology, Government Medical College, Thiruvananthapuram, Kerala), India. Department of Nephrology, Christian Medical College, The Alfred Hospital, Melbourne, Australia), Australia. Department of Nephrology, Christian Medical College, (Current Affiliation: Department of Renal Medicine, The Alfred Hospital, Melbourne, Australia), Australia. Department of Biochemistry, Christian Medical College, Vellore, Tamil Nadu, India. Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>INTRODUCTION: Individualized dialysate sodium prescription does affect weight</p>	NAT	JAN TO JUN	Nephrology, Biochemistry, Biostatistics	<p>PMID:3201592 PMC ID: PMC6977377 SCOPUS H-INDEX:22 IF: 3.698 BIOXBIO (2018/2019)</p>

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	gain, blood pressure (BP), and intradialytic complications. A prospective interventional trial (Dialysate Individualised Sodium (DISO) trial) was conducted to study this issue in Indian patients. METHODS: Forty patients on thrice-weekly maintenance hemodialysis (HD) for at least 6 weeks were enrolled. The study was performed in two different phases. In the first phase, 12 consecutive HD sessions were done with a standard dialysate sodium concentration of 140 mEq/L. In the second phase, 12 consecutive HD sessions were done with dialysate sodium concentration set to individualized value (mean of pre-HD sodium concentration multiplied by Donnan coefficient of 0.95). Differences in pre- and post-HD sodium, interdialytic weight gain (IDWG), pre- and post-HD BP, thirst scores, and intradialytic adverse events during both phases were assessed. RESULTS: The mean age of patients was 45.65 years (24 males, 16 females). The mean serum pre-HD sodium level was 138.7 ± 1.7 meq/L in the standard phase and 138.2 ± 2.6 meq/L in the individualized phase ($P = 0.229$). In the standard phase, the mean IDWG was 2.64 ± 1.56 kg and 2.13 ± 0.99 kg in the individualized phase ($P = 0.008$). The mean pre-HD systolic BP was 138 ± 18 mmHg and 134 ± 17 mmHg in the standard and individualized phases ($P = 0.008$). There was no difference in intradialytic symptoms, hypotensive episodes or requirement of interventions. Hypertension episodes occurred at a mean value of 2.2 and 1.2 in the standard and individualized phases, respectively ($P = 0.010$). CONCLUSION: The use of individualized dialysate sodium level is safe and results in lower IDWG, pre-HD systolic BP, and intradialytic hypertension in patients on HD.				
493.	<p>Rafic, K. H. M., Sujith, C., Rajesh, B., Babu, S. Es, Timothy, P. B., Selvamani, B. and Ravindran, P. B.</p> <p>A new strategy for craniospinal axis localization and adaptive dosimetric evaluation using cone beam CT</p> <p>Rep Pract Oncol Radiother; 2020, 25 (2): 282-292</p> <p>Address: Department of Radiation Oncology, Christian Medical College, Vellore 632 004, Tamil Nadu, India.</p> <p>BACKGROUND AND AIM: Computational complexities encountered in craniospinal irradiation (CSI) have been widely investigated with different planning strategies. However, localization of the entire craniospinal axis (CSA) and evaluation of adaptive treatment plans have traditionally been ignored in CSI treatment. In this study, a new strategy for CSI with comprehensive CSA localization and adaptive plan evaluation has been demonstrated using cone beam CT with extended longitudinal field-of-view (CBCT(eLFOV)). MATERIALS AND METHODS: Multi-scan CBCT images were acquired with fixed longitudinal table translations (with 1 cm cone-beam overlap) and then fused into a single DICOM-set using the custom software coded in MatLab™. A novel approach for validation of CBCT(eLFOV) was demonstrated by combined geometry of Catphan-504 and Catphan-604 phantoms. To simulate actual treatment scenarios, at first, the end-to-end workflow of CSI</p>	INT	JAN TO JUN	Radiation Oncology	<p>PMID:32140087</p> <p>PMC ID: PMC7052077</p> <p>SCOPUS</p> <p>H-INDEX:22</p> <p>IF: 0.680 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	with VMAT was investigated using an anthropomorphic phantom and then applied for two patients (based on random selection). RESULTS: The fused CBCT(eLFOV) images were in excellent agreement with planning CT (pCT). The custom developed software effectively manages spatial misalignments arising out of the uncertainties in treatment/setup geometry. Although the structures mapped from pCT to CBCT(eLFOV) showed minimal variations, a maximum spatial displacement of up to 1.2 cm (and the mean of 0.8 ± 0.3 cm) was recorded in phantom study. Adaptive plan evaluation of patient paradigms showed the likelihood of under-dosing the craniospinal target. CONCLUSION: Our protocol serves as a guide for precise localization of entire CSA and to ensure adequate dose to the large and complex targets. It can also be adapted for other complex treatment techniques such as total-marrow-irradiation and total-lymphoid-irradiation.				
494.	<p>Rafic, K. M., Patricia, S., Timothy Peace, B., Sujith, C. J., Selvamani, B. and Ravindran, P. B.</p> <p>Dosimetric and clinical advantages of adapting the DIBH technique to hybrid solitary dynamic portal radiotherapy for left-sided chest-wall plus regional nodal irradiation Med Dosim; 2020, Address: Department of Radiation Oncology, Christian Medical College, Vellore 632004, Tamil Nadu, India. Electronic Address: raficmphy@gmail.com. Department of Radiation Oncology, Christian Medical College, Vellore 632004, Tamil Nadu, India. Department of Radiation Oncology, Christian Medical College, Vellore 632004, Tamil Nadu, India. Electronic Address: tim_peace@yahoo.co.in. Department of Radiation Oncology, Christian Medical College, Vellore 632004, Tamil Nadu, India. Electronic Address: selvamani@cmcvellore.ac.in. Department of Radiation Oncology, Christian Medical College, Vellore 632004, Tamil Nadu, India; Dosimetry and Medical Radiation Physics Section, Division of Human Health, Department of Nuclear Sciences and Applications, International Atomic Energy Agency, Vienna International Centre, Vienna 1400, Austria. Electronic Address: paul@cmcvellore.ac.in.</p> <p>To evaluate the dosimetric and clinical advantages of using deep-inspiration breath-hold (DIBH) technique in hybrid solitary dynamic portal radiotherapy (hSDPRT) for left-sided chest-wall plus regional nodal irradiation and to demonstrate a simplified strategy for preclinical commissioning and calibration of DIBH-gating technique. Fifteen patients with left-sided breast cancer who underwent postmastectomy radiotherapy using hSDPRT were retrospectively evaluated. Two sets of planning-CT images were acquired for each patient, one with free/normal breathing and the other with DIBH. The hSDPRT plans were computed to deliver about 85% of the prescribed dose using static open fields and 15% of dose using a less complex solitary dynamic field. The dosimetric differences between the paired samples were compared using the Wilcoxon signed-rank test.</p>	INT	JAN TO JUN	Radiation Oncology	<p>PMID:32362370 SCOPUS H-INDEX:38 IF: 1.123 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	For clinical commissioning of gated treatments, a respiratory simulator equipped with a microcontroller was programmed to simulate free-breathing and DIBH-patterns using a custom-developed android application. While both the hSDPRT plans displayed identical target coverage on both the image-sets, the DIBH technique resulted in statistically significant differences in various dose-volume metrics of heart, left-anterior-descending artery, and ipsilateral-lung structures. The hSDPRT plan with DIBH entails reduced total monitor unit (354.9 ± 13.6 MU) and breath-hold time ranging from 2.9 ± 0.3 to 13.7 ± 0.8 seconds/field, along with an acceptable impact on overall machine throughput. DIBH is a feasible method to effectively address the delivery uncertainty and produce substantial sparing of heart and lung when combined with hSDPRT. Streamlined procedures for commissioning and calibration of DIBH-gating technique are essential for more efficient clinical practice.				
495.	<p>Ragaja, S. R., Dinesh, N. S., Madhuri, V. and Parameswaran, A. Development and Clinical Evaluation of a Posterior Active Walker for Disabled Children Journal of Intelligent & Robotic Systems; 2020, 97 (1): 47-65</p> <p>Address: [Ragaja, S. R.; Dinesh, N. S.] Indian Inst Sci, Dept Elect Syst Engn, Bangalore, Karnataka, India. [Madhuri, Vrisha] Christian Med Coll & Hosp, Paediat Orthpaed, Vellore, Tamil Nadu, India. [Parameswaran, Apurve] Christian Med Coll & Hosp, Dept Orthpaed, Vellore, Tamil Nadu, India. Ragaja, SR (reprint author), Indian Inst Sci, Dept Elect Syst Engn, Bangalore, Karnataka, India. ragaja04@gmail.com ; dinesh@iisc.ac.in</p> <p>This paper presents a novel posterior active walker designed for disabled children. The active walker adapts an existing posterior passive walker by motorising its back wheels and propelling them in accordance with intention of walking gait of the user. The gait intention of the user is determined from the position of user's trunk with respect to the walker frame using an array of sensors. The principle of working of the active walker is explained in this paper. A mathematical model for the active walker is developed and the same has been simulated for a control algorithm developed, which controls the walker in different possible conditions to achieve a comfortable and efficient propulsion. The simulation results present performance of the active walker. The walker has been practically implemented and the details of the same have been presented. The experimental functional evaluation of the walker has been done in the lab which matches the simulation result. Later the developed walker was assessed for its ability to track the user. Three healthy children are made to walk with the active walker on different surfaces and the test results show that the walker is able to effectively track the children. The developed walker was subjected to clinical evaluation which involved ten disabled children who were prescribed use of walker. Clinical study involved relative evaluation of effectiveness of passive and the active walkers. It was</p>	INT	JAN TO JUN	Paediatric Orthopaedics, Centre for Stem Cell Research	<p>WOS:000512052700005 SCOPUS H-INDEX:69 IF: 2.020 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	concluded from the clinical trials that the use of the developed active walker significantly reduces the energy spent by the user compared to the conventional passive walker.				
496.	<p>Ragupathi, N. K. D., Veeraraghavan, B., Sethuvel, D. P. M., Anandan, S., Vasudevan, K., Neeravi, A. R., Daniel, J. L. K., Sathyendra, S., Iyadurai, R. and Mutreja, A. First Indian report on genome-wide comparison of multidrug-resistant Escherichia coli from blood stream infections Plos One; 2020, 15 (2): 12</p> <p>Address: [Ragupathi, Naveen Kumar Devanga; Veeraraghavan, Balaji; Sethuvel, Dhiviyaa Praba Muthurulandi; Anandan, Shalini; Vasudevan, Karthick; Neeravi, Ayyan Raj; Daniel, Jones Lionel Kumar] Christian Med Coll & Hosp, Dept Clin Microbiol, Vellore, Tamil Nadu, India. [Ragupathi, Naveen Kumar Devanga] Univ Sheffield, Dept Chem & Biol Engr, Sheffield, S Yorkshire, England. [Sathyendra, Sowmya; Iyadurai, Ramya] Christian Med Coll & Hosp, Dept Med, Vellore, Tamil Nadu, India. [Mutreja, Ankur] Univ Cambridge, Addenbrookes Hosp, Dept Med, Cambridge, England. [Mutreja, Ankur] Translat Hlth Sci & Technol Inst THSTI, Delhi, India.</p> <p>Veeeraraghavan, B (reprint author), Christian Med Coll & Hosp, Dept Clin Microbiol, Vellore, Tamil Nadu, India. vbalaji@cmcvellore.ac.in</p> <p>Background Multidrug-resistant (MDR) E. coli with extended-spectrum beta-lactamases (ESBLs) is becoming endemic in health care settings around the world. Baseline data on virulence and antimicrobial resistance (AMR) of specific lineages of E. coli circulating in developing countries like India is currently lacking. Methods Whole-genome sequencing was performed for 60 MDR E. coli isolates. The analysis was performed at single nucleotide polymorphism (SNP) level resolution to identify the presence of their virulence and AMR genes. Results Genome comparison revealed the presence of ST-131 global MDR and ST410 as emerging-MDR clades of E. coli in India. AMR gene profile for cephalosporin and carbapenem resistance differed between the clades. Genotypes bla(CTX-M-15) and bla(NDM-5) were common among cephalosporinases and carbapenemases, respectively. For aminoglycoside resistance, rmtB was positive for 31.7% of the isolates, of which 95% were co-harboring carbapenemases. In addition, the FimH types and virulence gene profile positively correlated with the SNP based phylogeny, and also revealed the evolution of MDR clones among the study population with temporal accumulation of SNPs. The predominant clone was ST167 (bla(NDM) lineage) followed by ST405 (global clone ST131 equivalent) and ST410 (fast spreading high risk clone). Conclusions This is the first report on the whole genome analysis of MDR E. coli lineages circulating in India. Data from this study will provide public health agencies with baseline information on AMR and virulent genes in pathogenic E. coli in the region.</p>	INT	JAN TO JUN	Clinical Microbiology, Medicine	<p>WOS:000535233700001 SCOPUS H-INDEX:300 IF: 2.776 BIOXBIO (2018/2019)</p>
497.	Rahul, T. G., Francis, D. V., Pandit, S. and Suganthy, J.	INT	JAN TO JUN	Anatomy	SCOPUS

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Deplastination: Preservation of Histological Structures and its Anticipated Role in the Field of Histopathology Clinical Anatomy; 2020, 33 (1): 108-112</p> <p>Address: Department of Oral and Maxillofacial Pathology and Microbiology, A.J. Institute of Dental Sciences, Mangalore, India Department of Anatomy, Christian Medical College, Vellore, India</p> <p>Deplastination is the process of reversing plastination such that a plastinated specimen can be reverted to its raw nature. This would enable its use in the field of histopathology. The present study aims to ascertain if deplastinates can be used for histopathological studies after a time period. Tissue samples were taken from patients undergoing maxillofacial surgeries for oral carcinomas after obtaining written informed consent. The 12 specimens obtained were divided into two groups. One set of tissues was processed for paraffin embedding after 10% formalin fixation. The other set was plastinated by S10 silicon plastination. After 3 months, the plastinates were deplastinated using sodium methoxide and processed for routine hematoxylin and eosin staining, similar to the formalin fixed specimens. The slides were quantitatively assessed on parameters like tissue architecture, staining property, and intracellular structure. In addition, the slides were qualitatively evaluated by a pathologist who was blinded to the mode of preservation to see if identification of pathological features was possible on a deplastinated slide. The formalin preserved specimens and deplastinated tissue slides compared closely in all three parameters tested with the need to identify the endpoint of deplastination. Qualitatively, deplastination did not hamper identification of tissue pathology. Deplastination increases the scope of a stored plastinate by allowing histological studies in the future without the need for any preservatives or special storage equipment. It preserves structure and maintains tissue pathology. An improved method of ensuring the endpoint of deplastination needs to be identified. Clin. Anat. 32:108–112, 2019. © 2019 Wiley Periodicals, Inc.</p>				<p>H-INDEX:66 IF: 1.813 BIOXBIO (2018/2019)</p>
498.	<p>Rajagopal, K., Ramesh, S. and Madhuri, V. Early Addition of Parathyroid Hormone-Related Peptide Regulates the Hypertrophic Differentiation of Mesenchymal Stem Cells Cartilage; 2020, 1947603519894727</p> <p>Address: [Rajagopal, Karthikeyan; Ramesh, Sowmya; Madhuri, Vrisha] Ctr Stem Cell Res, Vellore, Tamil Nadu, India. [Rajagopal, Karthikeyan; Ramesh, Sowmya; Madhuri, Vrisha] Christian Med Coll & Hosp, Dept Paediat Orthopaed, First Floor, Paul Brand Bldg, Vellore 632004, Tamil Nadu, India. Madhuri, V (reprint author), Christian Med Coll & Hosp, Dept Paediat Orthopaed, First Floor, Paul Brand Bldg, Vellore 632004, Tamil Nadu, India. madhuriwalter@cmcvellore.ac.in</p>	INT	JAN TO JUN	Paediatric Orthopaedics	<p>PMID:31896268 WOS:000507045000001 SCOPUS H-INDEX:28 IF: 3.00 RESUCHIRFY (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>OBJECTIVE: Chondrogenic differentiation of mesenchymal stem cells (MSCs) into hyaline cartilage is complicated by terminal hypertrophic differentiation. In growth plate, parathyroid hormone-related peptide (1-34) (PTHrP) plays a crucial role in maintaining chondrocytes in their proliferation state by counteracting the hypertrophic differentiation. This study aims to test the effect of PTHrP supplementation at different time points on chondrogenic differentiation of MSCs and assess the final quality of differentiated chondrocytes. METHODS: Human periosteum and bone marrow MSCs isolated from 3 patient samples (donor unmatched) were characterized by flow cytometry and multilineage differentiation. The cells were differentiated into chondrocytes in the presence of transforming growth factor-β (TGF-β) and the PTHrP (1-34) was added from 4th or 14th day of culture. The outcome was analyzed by histology, immunohistochemistry, and gene expression. RESULTS: Flow cytometry and multilineage differentiation confirmed that the cells isolated from periosteum and bone marrow exhibited the phenotype of MSCs. During chondrogenic differentiation, pellets that received PTHrP from the 4th day of culture showed a significant reduction in hypertrophic markers (COL10A1 and RUNX) than the addition of PTHrP from the 14th day and TGF-β alone treated samples. Furthermore, 4th day supplementation of PTHrP significantly improved the expression of cartilage-specific markers (COL2A1, SOX9, ACAN) in both periosteum and bone marrow-derived MSCs. Histology and immunostaining with collagen type X data corroborated the gene expression outcomes. CONCLUSION: The outcome showed that supplementing PTHrP from the 4th day of chondrogenic differentiation produced better chondrocytes with less hypertrophic markers in both bone marrow and periosteal-derived MSCs.</p>				
499.	<p>Rajagopal, T. V., Isaac, B., Christopher, D. J., Thangakunam, B., Gupta, R. and James, P. The yield of bronchoscopy in sputum Xpert MTB/Rif negative tuberculosis in the Xpert era European Respiratory Journal; 2020, 56 Address: [Rajagopal, T., V; Isaac, Barney; Christopher, Devasahayam J.; Thangakunam, Balamugesh; Gupta, Richa; James, Prince] Christian Med Coll & Hosp, Dept Pulm Med, Vellore, Tamil Nadu, India. tvrgpal@gmail.com</p>	INT	JUL TO DEC	Pulmonary Medicine	WOS:000606501400469
500.	<p>Rajamani, B. M., Benjamin, E. S. B., Abraham, A., Ganesan, S., Lakshmi, K. M., Anandan, S., Karathedath, S., Varatharajan, S., Mohanan, E., Janet, N. B., Srivastava, V. M., Ramachandran Velayudhan, S., Kulkarni, U. P., Devasia, A. J., Fouzia, N. A., Korula, A., George, B., Srivastava, A., Mathews, V. and Balasubramanian, P. Plasma imatinib levels and ABCB1 polymorphism influences early molecular response and failure-free survival in newly diagnosed chronic phase CML patients Sci Rep; 2020, 10 (1): 20640 Address: Department of Haematology, Christian Medical College, Vellore,</p>	INT	JUL TO DEC	Haematology	PMID: 33244077 PMC:7691501 WOS:000596327900013

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	632004, India. Department of Haematology, Christian Medical College, Vellore , 632004, India. bpoonkuzhali@cmcvellore.ac.in. Achieving early molecular response (EMR) has been shown to be associated with better event free survival in patients with chronic phase chronic myeloid leukemia (CP-CML) on Imatinib therapy. We prospectively evaluated the factors influencing the 2-year failure free survival (FFS) and EMR to imatinib therapy in these patients including day29 plasma Imatinib levels, genetic variants and the gene expression of target genes in imatinib transport and biotransformation. Patients with low and intermediate Sokal score had better 2-year FFS compared to those with high Sokal Score (p = 0.02). Patients carrying ABCB1-C1236T variants had high day29 plasma imatinib levels (P = 0.005), increased EMR at 3 months (P = 0.044) and a better 2 year FFS (P = 0.003) when compared to those with wild type genotype. This translates to patients with lower ABCB1 mRNA expression having a significantly higher intracellular imatinib levels (P = 0.029). Higher day29 plasma imatinib levels was found to be strongly associated with patients achieving EMR at 3 months (P = 0.022), MMR at 12 months (P = 0.041) which essentially resulted in better 2-year FFS (p = 0.05). Also, patients who achieved EMR at 3 months, 6 months and MMR at 12 months had better FFS when compared to those who did not. This study suggests the incorporation of these variables in to the imatinib dosing algorithm as predictive biomarkers of response to Imatinib therapy.				
501.	Rajan, R., Cherian, K. E., Mathew, J., Asha, H. S., Kapoor, N. and Paul, T. V. Beyond sicca symptoms: Osteomalacia secondary to renal tubular acidosis in Sjogren syndrome Joint Bone Spine; 2020, 105064 Address: Departments of Endocrinology, Christian Medical College , 632004 Vellore , India. Departments of Endocrinology, Christian Medical College , 632004 Vellore , India. Electronic Address: kripaec@gmail.com . Rheumatology, Christian Medical College , 632004 Vellore , India. Departments of Endocrinology, Christian Medical College , 632004 Vellore , India. Electronic Address: thomasvpaul@yahoo.com .	INT	JUL TO DEC	Endocrinology, Rheumatology	PMID: 32952003
502.	Rajan, R., Kapoor, N., Asha, H. S., Paul, T. V. and Thomas, N. Idiopathic systemic capillary leak syndrome - An often missed diagnosis Trop Doct; 2020, 49475520979299 Address: Senior PG Registrar, Department of Endocrinology and Metabolism, Christian Medical College, Vellore , India. Associate Professor, Department of Endocrinology and Metabolism, Christian Medical College, Vellore , India. Professor, Department of Endocrinology and Metabolism, Christian Medical College, Vellore , India. Idiopathic systemic capillary leak syndrome (ISCLS) is a potentially fatal disorder characterised by 'attacks' of varying intensity of hypovolemic shock in association	INT	JUL TO DEC	Endocrinology and Metabolism	PMID: 33349162

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	with haemoconcentration and hypoalbuminaemia. It is a disease of exclusion, and the severity of attacks may mimic sepsis at presentation. We report a case of a lady with recurrent attacks of ISCLS with at least two life-threatening episodes, having been treated elsewhere as a case of steroid insufficiency. The diagnosis is often challenging, and treatment of an acute episode involves the judicious use of fluids and vasopressors, as required. Prophylaxis to prevent further attacks is of varied success.				
503.	<p>Rajan, R., Paul, J., Cherian, K. E., Asha, H. S., Kapoor, N. and Paul, T. V. FRAX® with or without BMD and TBS predicts fragility fractures in community-dwelling rural southern Indian postmenopausal women Arch Osteoporos; 2020, 15 (1): 82</p> <p>Address: Department of Endocrinology, Christian Medical College, Vellore, India. Department of Endocrinology, Christian Medical College, Vellore, India. thomasvpaul@yahoo.com.</p> <p>This study from southern India showed that FRAX® with or without BMD or TBS predicted fragility vertebral fractures at a cut-off of $\geq 9\%$ for major osteoporotic fracture and $\geq 2.5\%$ for hip fracture with sensitivities of 77-88% and specificities of 55-72%. PURPOSE: There is limited information available with regard to utility of Fracture Risk Assessment Tool (FRAX® tool) in predicting fragility fractures in Indian postmenopausal women. We studied the performance of 3 categories: FRAX® (without BMD), FRAX® (with BMD), and FRAX® (with BMD and TBS) in predicting fragility vertebral fractures in rural postmenopausal women. MATERIAL AND METHODS: It was a cross-sectional study conducted at a south Indian tertiary care center. Rural postmenopausal women (n = 301) were recruited by simple random sampling. The risk for major osteoporotic fracture (MOF) and hip fracture (HF) was calculated individually for the 3 categories. The BMD (at lumbar spine and femoral neck) and vertebral fractures were assessed by a DXA (dual energy X-ray absorptiometry) scanner and TBS by TBS iNsight software. ROC curves were constructed, and area under curve (AUC), sensitivity and specificity of FRAX® scores, which would best predict prevalent vertebral fractures (moderate to severe), was computed. RESULTS: The mean (SD) age was 65.6(5.1) years. The prevalence of osteoporosis at spine was 45%, and femoral neck was 32.6%. Moderate to severe vertebral fractures was seen in 29.2% of subjects. The performance of all 3 categories for FRAX® (MOF) and FRAX® (HF) were good (AUC was 0.798, 0.806, and 0.800, respectively, for MOF) at a cut-off score of ≥ 9, and at a cut-off of ≥ 2.5 for HF, it was 0.818, 0.775, and 0.770, respectively. At these cut-offs, sensitivities were 77-89%, and specificities were 55-72% for predicting prevalent vertebral fractures. CONCLUSION: All three categories of FRAX® showed good performance in predicting fractures in Indian postmenopausal women. Thus, it may be utilized for decision regarding treatment and referral for osteoporosis.</p>	INT	JAN TO JUN	Endocrinology	<p>PMID:32483672 SCOPUS H-INDEX:27 IF: 2.0 RG (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
504.	<p>Rajaratnam, S., Jeyaseelan, L. and Rajshekhar, V. Delayed Hyponatremia Following Surgery for Pituitary Adenomas: An Under-recognized Complication Neurol India; 2020, 68 (2): 340-345</p> <p>Address: Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore, Tamil Nadu, India. Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India. Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND: Delayed hyponatremia is a serious complication seen after pituitary surgery. We document the incidence, presentation, outcome and risk factors for this condition. MATERIALS AND METHODS: This was a retrospective study involving 222 patients operated for nonfunctioning pituitary macroadenomas between 2007-2016. Delayed hyponatremia was defined as serum sodium <135 mmol/L, occurring after the third post-operative day. Hyponatremia was categorized as mild (134-130 mmol/L), moderate (129-125 mmol/L) and severe (<125 mmol/L). All patients received intravenous (0.9%) saline, intravenous hydrocortisone and 12g oral salt over 24 hours. Patients with severe hyponatremia were given 3% saline. RESULTS: Fifty eight patients (26%) developed delayed hyponatremia; thirty (13.5%) had severe hyponatremia. Delayed hyponatremia usually (43.1%) occurred on the seventh post-operative day (range, 3-15 days). Most patients (81%) remained asymptomatic; 11 patients developed vomiting (5), seizures (3), lethargy (1), fever (1) and paralytic ileus (1). One patient developed status epilepticus. Patients who manifest symptoms had lower sodium levels as compared to those who did not have symptoms (mean 117.7 mmol/L vs. 123 mmol/L; P < 0.01). Male gender (P = 0.002) and intra-operative CSF leak (P = 0.003) were risk factors for developing delayed hyponatremia. Other factors like, age, pre-operative cortisol levels, extent of resection and post-operative diabetes insipidus did not correlate with the occurrence of delayed hyponatremia. Patients who maintained their mean serum sodium levels >138 mmol/L (day 1-day 3) were unlikely to develop delayed hyponatremia (sensitivity, 55.2% and specificity, 83.9%), positive predictive value, 63.2% [confidence interval (CI) 48, 76.7%] and negative predictive value, 78.8% (CI 70.6, 85.5%). In most patients (57%) hyponatremia was corrected within 48 hours (h). CONCLUSIONS: We recommend routine serum sodium testing on the seventh post-operative day for all patients undergoing pituitary surgery. Most patients remain asymptomatic and unless they are detected early they can go on to develop serious complications.</p>	NAT	JAN TO JUN		<p>PMID:32189698 SCOPUS H-INDEX:45 IF: 2.708 BIOXBIO (2018/2019)</p>
505.	<p>Rajkumar, P., Bharathy, S., Kumar, C. P. G., Veeraraghavan, B., Verghese, V., Gupta, N., Kangusamy, B., Ravi, M., Jayaraman, Y. and Team, Hbsspid Network</p>	INT	JAN TO JUN	Clinical Microbiology, Child Health	<p>WOS:000538150800060 SCOPUS</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Hospital-based sentinel surveillance for Streptococcus pneumoniae and other invasive bacterial diseases in India (HBSSPIBD): design and methodology Bmj Open; 2020, 10 (4): 9</p> <p>Address: [Rajkumar, Prabu; Bharathy, Sukumar; Kangusamy, Boopathi; Jayaraman, Yuvaraj] ICMR Natl Inst Epidemiol, Hlth Syst Res, Chennai, Tamil Nadu, India. [Kumar, C. P. Girish] ICMR Natl Inst Epidemiol, Lab Div, Chennai, Tamil Nadu, India. [Veeraraghavan, Balaji] Christian Med Coll & Hosp, Dept Clin Microbiol, Vellore, Tamil Nadu, India. [Verghese, Valsan] Christian Med Coll & Hosp Vellore, Dept Child Hlth, Vellore, Tamil Nadu, India. [Gupta, Nivedita] Indian Council Med Res, Epidemiol & Communicable Dis, New Delhi, India. [Ravi, Muthusamy] ICMR Natl Inst Epidemiol, Comp & Informat Sci, Chennai, Tamil Nadu, India. Jayaraman, Y (reprint author), ICMR Natl Inst Epidemiol, Hlth Syst Res, Chennai, Tamil Nadu, India. j_yuvan@yahoo.com</p> <p>Introduction Streptococcus pneumoniae is one of the frequently isolated organisms and an important aetiological agent of invasive bacterial diseases (IBD) like pneumonia, meningitis and sepsis. As a measure to control the burden of IBD, the Government of India introduced Pneumococcal Conjugate Vaccine-13 (PCV-13) in the Universal Immunization Program in high burden districts of five states in a phased manner from 2017 onwards. It is essential to understand the trend of circulating pneumococcal serotypes associated with IBD in the prevaccination and postvaccination scenarios to decide on the expansion of vaccination programmes and PCV reformulation. This manuscript describes the protocol for hospital-based sentinel surveillance for S. pneumoniae and other organisms causing IBD across various geographical regions in India. Methods and analysis Hospital-based surveillance is established in selected hospitals to recruit children aged 1-59 months with symptoms of pneumonia and other IBD. Diagnostic criteria were adapted from standard WHO case definitions. Case Report Forms (CRFs) are used to collect data from the enrolled children. Blood, cerebrospinal fluid (CSF) and other normally sterile body fluids are collected and subjected to microscopy, cytology, latex agglutination, biochemistry, bacteriological culture and real-time PCR as applicable. Pneumococcal isolates are serotyped and tested for assessing antimicrobial resistance patterns. Data will be analysed by simple descriptive statistics to estimate the proportion of pneumonia and other IBD due to S. pneumoniae, Hemophilus influenzae type b and Neisseria meningitidis. Prevalence of bacterial infection, circulating pneumococcal serotypes, antibiotic resistance patterns, serotype variability across seasons and regions will be described in terms of percentage with 95% confidence interval.</p>				<p>H-INDEX:22 IF: 2.376 BIOXBIO (2018/2019)</p>
506.	<p>Ramamoorthy, H., Abraham, P. and Isaac, B. Melatonin protects against tenofovir-induced nephrotoxicity in rats by targeting multiple cellular pathways</p>	INT	JUL TO DEC	Biochemistry, Anatomy	PMID: 33146023

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Hum Exp Toxicol; 2020, 960327120968860 Address: Department of Biochemistry, Christian Medical College, Vellore, Tamil Nadu, India. Department of Anatomy, Christian Medical College, Vellore, Tamil Nadu, India. Nephrotoxicity is a dose-limiting side effect of long-term use of tenofovir, a reverse transcriptase inhibitor that is used for the treatment of HIV infection and chronic hepatitis B infection. Identifying an agent that prevents tenofovir disoproxil fumarate (TDF)-induced renal injury can lead to its better tolerance, and a more effective treatment can be achieved. The present study is aimed at investigating whether melatonin, a potent antioxidant and anti-inflammatory agent, protects against TDF nephrotoxicity in rats and to determine its cellular targets. Rats were divided into groups and treated as follows. Group I (control): Rats in this group (n = 6) received sterile water only by gavage for 35 days. Group II: Rats (n = 6) in this group received 600 mg/kg body weight TDF in sterile water by gavage for 35 days. Group III: Rats (n = 6) in this group received once daily 20 mg/kg bodyweight melatonin i.p. 2 h before the administration of 600 mg/kg body weight TDF in sterile water by gavage for 35 days. Group IV: Rats were pretreated daily with 20 mg/kg body weight melatonin i.p. 2 h before the administration of sterile water by gavage. All the rats were sacrificed on the 36th day, after overnight fast. Melatonin pretreatment protected the rats against TDF nephrotoxicity both histologically and biochemically. Biochemically, melatonin pretreatment attenuated TDF-induced, oxidative stress, nitrosative stress, mitochondrial pathway of apoptosis, PARP overactivation and preserved proximal tubular function (p < 0.01). This suggests that melatonin may be useful in ameliorating TDF nephrotoxicity.</p>				
507.	<p>Ramanathan, K., Thenmozhi, M., George, S., Anandan, S., Veeraraghavan, B., Naumova, E. N. and Jeyaseelan, L. Assessing Seasonality Variation with Harmonic Regression: Accommodations for Sharp Peaks Int J Environ Res Public Health; 2020, 17 (4):</p> <p>Address: [Ramanathan, Kavitha; Thenmozhi, Mani; Jeyaseelan, Lakshmanan] Christian Med Coll & Hosp, Dept Biostat, Vellore 632002, Tamil Nadu, India. [George, Sebastian] St Thomas Coll, Dept Stat, Palai 686575, Kerala, India. [Anandan, Shalini; Veeraraghavan, Balaji] Christian Med Coll & Hosp, Dept Clin Microbiol, Vellore 632004, Tamil Nadu, India. [Naumova, Elena N.] Tufts Univ, Friedman Sch Nutr Sci & Policy, Boston, MA 02111 USA. [Naumova, Elena N.] Christian Med Coll & Hosp, Dept Gastrointestinal Sci, Vellore 632004, Tamil Nadu, India. Jeyaseelan, L (reprint author), Christian Med Coll & Hosp, Dept Biostat, Vellore 632002, Tamil Nadu, India. kavitha.opm@gmail.com; mani.thenmozhi@gmail.com; sthottom@gmail.com; shalinianandan@cmcvellore.ac.in; vbalaji@cmcvellore.ac.in; elena.naumova@tufts.edu; ljev@cmcvellore.ac.in</p>	INT	JAN TO JUN	Biostatistics, Clinical Microbiology, Gastrointestinal Science	<p>PMID:32085630 PMC ID: PMC7068504 WOS:000522388500194 SCOPUS H-INDEX:92 IF: 2.468 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	The use of the harmonic regression model is well accepted in the epidemiological and biostatistical communities as a standard procedure to examine seasonal patterns in disease occurrence. While these models may provide good fit to periodic patterns with relatively symmetric rises and falls, for some diseases the incidence fluctuates in a more complex manner. We propose a two-step harmonic regression approach to improve the model fit for data exhibiting sharp seasonal peaks. To capture such specific behavior, we first build a basic model and estimate the seasonal peak. At the second step, we apply an extended model using sine and cosine transform functions. These newly proposed functions mimic a quadratic term in the harmonic regression models and thus allow us to better fit the seasonal spikes. We illustrate the proposed method using actual and simulated data and recommend the new approach to assess seasonality in a broad spectrum of diseases manifesting sharp seasonal peaks.				
508.	<p>Ramasamy, S., Joseph, M., Jiwanmall, S. A., Kattula, D., Nandyal, M. B., Abraham, V., Samarasam, I., Paravathareddy, S., Paul, T. V., Rajaratnam, S., Thomas, N. and Kapoor, N.</p> <p>Obesity Indicators and Health-related Quality of Life - Insights from a Cohort of Morbidly Obese, Middle-aged South Indian Women Eur Endocrinol; 2020, 16 (2): 148-151 Address: Weill Cornell Medicine, New York, NY, USA. Department of Endocrinology, Diabetes and Metabolism, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Department of Psychiatry, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Department of Upper Gastrointestinal Surgery, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Noncommunicable Disease Unit, Melbourne School of Population and Global Health, University of Melbourne, Victoria, Australia.</p> <p>OBJECTIVE: The global prevalence of obesity is increasing and has nearly doubled in the last decade, disproportionately impacting less-developed countries. The aim of this cross-sectional study was to analyse health-related quality of life (HRQOL) in morbidly obese women attending a bariatric clinic in India, and assess potential obesity indicators that can be utilised in under-resourced settings, to better understand HRQOL of individual patients. METHODS: Anthropometric measurements were collected, including waist circumference, hip circumference, waist-hip ratio, waist-height ratio and body mass index (BMI). HRQOL was assessed using an obesity-related quality-of-life questionnaire focused on the impact of obesity on physical distress, self-esteem, sexual life and work life. RESULTS: The average BMI of study participants was 39.6 kg/m², with an average HRQOL of 40.2%. The strongest correlation was noted between BMI and HRQOL (R²=0.16). Exploratory analyses demonstrated that patients with higher BMI quartiles had lower scores for physical impact and psychosocial impact, and higher scores for sexual health, comfort with food, and experience with dieting compared</p>	INT	JUL TO DEC	Endocrinology, Diabetes and Metabolism, Psychiatry, Upper Gastrointestinal Surgery	<p>PMID: 33117447 PMC:7572161</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	to patients in lower quartiles. CONCLUSION: In South Indian, middle-aged, morbidly obese women, HRQOL is lower than average and is highly correlated with BMI, with different BMI levels having higher impacts in different subcategories, supporting the need for an individualised therapeutic focus for each patient.				
509.	<p>Ramesh, S., Sävendahl, L., Madhuri, V. and Zaman, F. Radial shock waves prevent growth retardation caused by the clinically used drug vismodegib in ex vivo cultured bones Sci Rep; 2020, 10 (1): 13400 Address: Department of Paediatric Orthopaedics, Christian Medical College, Vellore, 632 004, India. sowmya.ramesh@ki.se. Division of Paediatric Endocrinology, Department of Women's and Children's Health, Karolinska Institutet, 171 76, Solna, Sweden. sowmya.ramesh@ki.se. Centre for Stem Cell Research, A Unit of inStem Bengaluru, Christian Medical College, Bagayam, Vellore, 632 002, India. sowmya.ramesh@ki.se. Division of Paediatric Endocrinology, Department of Women's and Children's Health, Karolinska Institutet, 171 76, Solna, Sweden. Paediatric Endocrinology and Metabolism, Astrid Lindgren Children's Hospital, Karolinska University Hospital, 171 76, Solna, Sweden. Department of Paediatric Orthopaedics, Christian Medical College, Vellore, 632 004, India. Centre for Stem Cell Research, A Unit of inStem Bengaluru, Christian Medical College, Bagayam, Vellore, 632 002, India.</p> <p>In childhood medulloblastoma patients, the hedgehog antagonist vismodegib is an effective anti-cancer treatment but unfortunately induces irreversible growth arrests and growth impairment limiting its use in skeletally immature patients. We hypothesized that radial shock wave treatment (rSWT) may protect drug-induced growth impairment owing to its osteogenic effects. Fetal rat metatarsal bones were exposed to vismodegib (day 0-5; 100 nM) and/or rSWT (single session); other bones from day 1 were continuously exposed to a Gli1 antagonist (GANT61; 10 µM) and/or rSWT (single session). Control bones were untreated. The bone length was measured at intervals; histomorphometric analysis and immunostaining for PCNA, Gli1, and Ihh were performed on the sectioned bones. Bones treated with vismodegib showed impaired bone growth, reduced height of the resting-proliferative zone and reduced hypertrophic cell size compared to control. In vismodegib treated bones, a single session of rSWT partially rescued bone growth, increased the growth velocity, hypertrophic cell size, and restored growth plate morphology. Bones exposed to GANT61 showed impaired bone growth and disorganized growth plate while when combined with rSWT these effects were partially prevented. Locally applied rSWT had a chondroprotective effect in rat metatarsal bones and suggest a novel strategy to prevent growth impairment caused by vismodegib.</p>	INT	JUL TO DEC	Paediatric Orthopaedics, Centre for Stem Cell Research	PMID: 32770014 PMC:7414117
510.	<p>Ramesh, S., Zaman, F., Madhuri, V. and Savendahl, L. Radial Extracorporeal Shock Wave Treatment Promotes Bone Growth and</p>	INT	JAN TO JUN	Paediatric orthopaedics, Centre for Stem Cell Research	WOS:000526812400035 SCOPUS

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Chondrogenesis in Cultured Fetal Rat Metatarsal Bones Clinical Orthopaedics and Related Research; 2020, 478 (3): 668-678</p> <p>Address: [Ramesh, Sowmya; Madhuri, Vrisha] Christian Med Coll & Hosp, Paediat Orthopaed, Vellore 632004, Tamil Nadu, India. [Ramesh, Sowmya; Zaman, Farasat; Savendahl, Lars] Karolinska Inst, Dept Womens & Childrens Hlth & Paediat Endocrinol, Solna, Sweden. [Ramesh, Sowmya; Madhuri, Vrisha] Christian Med Coll & Hosp, Ctr Stem Cell Res, Vellore, Tamil Nadu, India. Ramesh, S (reprint author), Christian Med Coll & Hosp, Paediat Orthopaed, Vellore 632004, Tamil Nadu, India.; Ramesh, S (reprint author), Karolinska Univ Hosp, J9 30,Visionsgatan 4, S-17164 Solna, Sweden. sowmya1992@gmail.com</p> <p>Background Substantial evidence exists to show the positive effects of radiaextracorporeal shock wave therapy (ESWT) on bone formation. However, it is unknown whether rESWT can act locally at the growth plate level to stimulate linear bone growth. One way to achieve this is to stimulate chondrogenesis in the growth plate without depending on circulating systemic growth factors. We wished to see whether rESWT would stimulate metatarsal rat growth plates in the absence of vascularity and associated systemic growth factors. Questions/purposes To study the direct effects of rESWT on growth plate chondrogenesis, we asked: (1) Does rESWT stimulate longitudinal bone growth of ex vivo cultured bones? (2) Does rESWT cause any morphological changes in the growth plate? (3) Does rESWT locally activate proteins specific to growth plate chondrogenesis? Methods Metatarsal bones from rat fetuses were untreated (controls: n = 15) or exposed to a single application of rESWT at a low dose (500 impulses, 5 Hz, 90 mJ; n = 15), mid-dose (500 impulses, 5 Hz, 120 mJ; n = 14) or high dose (500 impulses, 10 Hz, 180 mJ; n = 34) and cultured for 14 days. Bone lengths were measured on Days 0, 4, 7, and 14. After 14 days of culturing, growth plate morphology was assessed with a histomorphometric analysis in which hypertrophic cell size (> 7 μ m) and hypertrophic zone height were measured (n = 6 bones each). Immunostaining for specific regulatory proteins involved in chondrogenesis and corresponding staining were quantitated digitally by a single observer using the automated threshold method in ImageJ software (n = 6 bones per group). A p value < 0.05 indicated a significant difference. Results The bone length in the high-dose rESWT group was increased compared with that in untreated controls (4.46 mm +/- 0.75 mm; 95% confidence interval, 3.28-3.71 and control: 3.50 mm +/- 0.38 mm; 95% CI, 4.19-4.72; p = 0.01). Mechanistic studies of the growth plate's cartilage revealed that high-dose rESWT increased the number of proliferative chondrocytes compared with untreated control bones (1363 +/- 393 immunopositive cells per bone and 500 +/- 413 immunopositive cells per bone, respectively; p = 0.04) and increased the diameter of hypertrophic chondrocytes (18 +/- 3 μ m and 13 +/- 3 μ m, respectively; p < 0.001). This was accompanied by activation of insulin-like growth factor-1 (1015 +/- 322 immunopositive cells per bone and 270 +/- 121</p>				<p>H-INDEX:197 IF: 4.157 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	immunopositive cells per bone, respectively; p = 0.043) and nuclear factor-kappa beta signaling (1029 +/- 262 immunopositive cells per bone and 350 +/- 60 immunopositive cells per bone, respectively; p = 0.01) and increased levels of the anti-apoptotic proteins B-cell lymphoma 2 (718 +/- 86 immunopositive cells per bone and 35 +/- 11 immunopositive cells per bone, respectively; p < 0.001) and B-cell lymphoma-extra-large (107 +/- 7 immunopositive cells per bone and 34 +/- 6 immunopositive cells per bone, respectively; p < 0.001). Conclusion In a model of cultured fetal rat metatarsals, rESWT increased longitudinal bone growth by locally inducing chondrogenesis. To verify whether rESWT can also stimulate bone growth in the presence of systemic circulatory factors, further studies are needed.				
511.	<p>Rao, S. V., Udhayachandar, R., Rao, V. B., Raju, N. A., Nesaraj, J. J., Kandasamy, S. and Samuel, P.</p> <p>Voluntary Prone Position for Acute Hypoxemic Respiratory Failure in Unintubated Patients</p> <p>Indian J Crit Care Med; 2020, 24 (7): 557-562</p> <p>Address: Surgical ICU, Division of Critical Care, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Critical Care Unit, Department of Medicine, Launceston General Hospital, Launceston, Tasmania, Australia.</p> <p>Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Severe hypoxemic respiratory failure is frequently managed with invasive mechanical ventilation with or without prone position (PP). We describe 13 cases of nonhypercapnic acute hypoxemic respiratory failure (AHRF) of varied etiology, who were treated successfully in PP without the need for intubation. Noninvasive ventilation (NIV), high-flow oxygen via nasal cannula, supplementary oxygen with venturi face mask, or nasal cannula were used variedly in these patients. Mechanical ventilatory support is offered to patients with AHRF when other methods, such as NIV and oxygen via high-flow nasal cannula, fail. Invasive mechanical ventilation is fraught with complications which could be immediate, ranging from worsening of hypoxemia, worsening hemodynamics, loss of airway, and even death. Late complications could be ventilator-associated pneumonia, biotrauma, tracheal stenosis, etc. Prone position is known to improve oxygenation and outcome in adult respiratory distress syndrome. We postulated that positioning an unintubated patient with AHRF in PP will improve oxygenation and avoid the need for invasive mechanical ventilation and thereby its complications. Here, we describe a series of 13 patients with hypoxemic respiratory of varied etiology, who were successfully treated in the PP without endotracheal intubation. Two patients (15.4%) had mild, nine (69.2%) had moderate, and two (15.4%) had severe hypoxemia. Oxygenation as assessed by PaO₂/FiO₂ ratio in supine position was 154 ± 52, which improved to 328 ± 65 after PP. Alveolar to arterial (A-a) O₂ gradient improved from a median of 170.5 mm Hg interquartile range (IQR) (127.8, 309.7) in supine position to 49.1 mm Hg IQR (45.0, 56.6) after PP. This</p>	NAT	JUL TO DEC	Surgical ICU, Division of Critical Care, Biostatistics	<p>PMID: 32963439</p> <p>PMC:7482355</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	improvement in oxygenation took a median of 46 hours, IQR (24, 109). Thus, voluntary PP maneuver improved oxygenation and avoided endotracheal intubation in a select group of patients with hypoxemic respiratory failure. This maneuver may be relevant in the ongoing novel coronavirus disease pandemic by potentially reducing endotracheal intubation and the need for ventilator and therefore better utilization of critical care services. HOW TO CITE THIS ARTICLE: Rao SV, Udhayachandar R, Rao VB, Raju NA, Nesaraj JJJ, Kandasamy S, et al. Voluntary Prone Position for Acute Hypoxemic Respiratory Failure in Unintubated Patients. Indian J Crit Care Med 2020;24(7):557-562.				
512.	<p>Rasalam, J. E., Kumar, S., Amalraj, P., Bal, H. S., Mathai, J., Kumar, M., Sridhar, S. and Daniel, D. Do red cell alloantibodies continue to challenge breast fed babies? Transfus Med; 2020, 30 (4): 281-286</p> <p>Address: [Rasalann, Jess E.; Kumar, Snehil; Annalraj, Pushpanathan; Daniel, Dolly] Christian Med Coll & Hosp, Dept Transfus Med & Mmunohaematol, 5th Floor,ASHA Bldg, Vellore, Tamil Nadu, India. [Bal, Harshjeet S.; Mathai, John] Christian Med Coll & Hosp, Dept Paediat Surg, Vellore, Tamil Nadu, India. [Kumar, Manish; Sridhar, Santhanam] Christian Med Coll & Hosp, Dept Neonatol, Vellore, Tamil Nadu, India.</p> <p>Rasalann, JE (reprint author), Christian Med Coll & Hosp, Dept Transfus Med & Mmunohaematol, 5th Floor,ASHA Bldg, Vellore, Tamil Nadu, India. jasalam@gmail.com</p> <p>BACKGROUND: Newborns have limited specific immune capability at birth, owing to delayed and constrained development of adaptive immunity. To supplement this period the mother passively transfers antibodies to the child either transplacentally or through breast milk. When maternal alloimmunisation occurs through foreign or fetal red cell surface antigens, stimulating the production of immunoglobulin G (IgG) antibodies, these IgG antibodies can cross the placenta and cause haemolytic disease of the fetus and the newborn. OBJECTIVE: We present two case reports of a neonate and an infant in whom IgG red cell alloantibodies were transferred through maternal breast milk. METHODS: Maternal serum, baby's serum and expressed breast milk samples were tested for the presence of red cell alloantibodies using gel card. Antibody screening, antibody identifications and titres alongside monospecific direct antiglobulin test, IgG subtypes were performed using the standard methods. RESULTS: In the first case, a 6-month-old child was incidentally found to have positive antibody screen. Anti-KELL1 was identified, which was also present in maternal serum and breast milk. The second neonate was evaluated for haemolysis and was found to have anti-D. Anti-D was also detected in the maternal serum and breast milk. Both babies did not have any sensitising events. The first baby was asymptomatic, but the second baby had ongoing haemolysis until 1 month. CONCLUSION: We report that maternal anti-</p>	INT	JAN TO JUN	Transfusion and Immunohaematology, Paediatric Surgery, Neonatology	<p>PMID:32083382 WOS:000514677200001 H-INDEX:58 IF: 3.00 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	KELL1 and anti-D antibodies were present in breast milk and were capable of being transferred to a feeding child. Our case report also raises interesting and unanswered immunologic fundamentals that should be considered in neonates with unexplained anaemia or delayed and persistent haemolysis.				
513.	<p>Ratinam, J., Mishra, A. K., Muthuram, A. J., Miraclin, A., Chandy, G. M., Vanjare, H. A., Turaka, V. P., Jude, J., Hansdak, S. G. and Iyadurai, R.</p> <p>Role of cerebrospinal fluid C-reactive protein in tuberculous meningitis Int J Mycobacteriol; 2020, 9 (4): 422-428</p> <p>Address: Department of Internal Medicine, Christian Medical College, Vellore, Tamil Nadu, India. Department of Internal Medicine, St Vincent Hospital, Worcester, MA, USA. Department of Radiology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Microbiology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Internal Medicine, Unit IV, Christian Medical College, Vellore, Tamil Nadu, India. Department of Internal Medicine, Unit V, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND: Tuberculosis (TB) is still a significant health problem worldwide. Central nervous system TB amounts to 10% of all cases of TB. Despite advances in the pharmacological management of TB, the overall outcomes remain poor with significant mortality and morbidity. There are no predictors for neurological outcomes in tuberculosis meningitis (TBM). In this study, we aimed to evaluate the role of cerebrospinal fluid (CSF) C-reactive protein (CRP) in predicting mortality and neurological outcome in TBM. Method: In this observational study, all patients with TBM were recruited prospectively over a 12-month duration. Baseline demographic data, laboratory parameters, and Imaging findings were collected. CSF CRP was obtained on the CSF sample collected at the time of diagnosis. Patients were followed up at 3 months to assess neurological status and mortality. RESULTS: Seventy-one patients with TBM were recruited in this study. The overall mortality in this study was 22.5% of patients. The primary composite outcome of mortality and adverse neurological outcome occurred in 40.8%. The CSF CRP levels ranged between 0.1 and 4.8 mg/dl, and the mean CSF CRP level was 1.11 mg/dl. The Relative risk for a patient with high CSF CRP to develop adverse outcome was 1.84 (P = 0.038). CSF CRP was a good predictor of mortality with a relative risk of 2.92 (P = 0.027). Stroke in TBM had a high incidence of 47.9% and a relative risk of 3.42 for an adverse neurological outcome. CSF CRP did not predict the occurrence of stroke. Hydrocephalus and elevated intracranial pressure were good predictors of stroke. CONCLUSION: TBM is a disease with significant mortality and morbidity. CRP level in the CSF can be measured, but a highly sensitive scale may be needed as the mean values were much lower compared to the serum values. CSF CRP Levels showed significant associations with adverse outcomes and mortality.</p>	INT	JUL TO DEC	Internal Medicine, Radiology, Microbiology, Internal Medicine, Unit IV	PMID: 33323659
514.	Raveendran, S., Thomas, B. P. and Jayaseelan, V.	INT	JUL TO DEC	Hand Surgery, Biostatistics	PMID: 33408441

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>The Efficiency of WhatsApp in Teleconsultation of Finger Vascularity in Hand Surgery J Hand Microsurg; 2020, 12 (3): 163-167 Address: Dr. Paul Brand Centre for Hand Surgery, Christian Medical College Vellore, Vellore, Tamil Nadu, India. Department of Biostatistics, Christian Medical College Vellore, Vellore, Tamil Nadu, India.</p> <p>Background Teleconsultation over the smartphone is now widely used in modern medicine in the management of burns, flap cover, upper extremity trauma, and in the assessment of the feasibility of reimplantation in amputated fingers. The development of the WhatsApp application has enhanced the smartphone's efficiency remarkably to transmit images in clinical and academic settings with its failsafe and encrypted technology. In hand surgery, a teleconsultation technology must communicate details of finger vascularity effectively. However, there is a paucity of evidence on the functionality of these modern teleconsultation technologies in Hand Surgery. Here, the authors have estimated the efficiency of the WhatsApp teleconsultation in the assessment of finger vascularity. Materials and Methods In two phases, the authors transmitted clinical photographs of vascular and avascular fingers to experienced hand surgeons over the WhatsApp and asked them to assess the finger vascularity. The efficiency of the WhatsApp teleconsultation in assessing the details of finger vascularity was estimated from their responses. Results Despite 81.06% of the hand surgeons rating the vascular fingers on the transmitted photographs correctly, only 44.95% detected the avascular digits accurately; that is, 55.05% of the surgeons failed to diagnose the avascularity of fingers. This suggests serious implications in a clinical setting. The intra- and the inter-rater reliability values were 0.232 and 0.6086 (with 95% confidence interval), respectively, which indicated poor reliability of the WhatsApp teleconsultation regarding the assessment of finger vascularity. Conclusion The authors, therefore, conclude that WhatsApp is inadequate in teleconsultation given the value of vascularity details of the fingers in making a diagnosis in hand surgery.</p>				PMC:7773502
515.	<p>Ravikumar, S., Srinivasaraghavan, R., Gunasekaran, D., Sundar, S. and Soundararajan, P. Vestibular stimulation with Indian hammock versus music intervention in the prevention of infantile colic in term infants: An open-labelled, randomized controlled trial International Journal of Pediatrics and Adolescent Medicine; 2020, 7 (4): 191-195 Address: Department of Pediatrics, Mahatma Gandhi Medical College and Research Institute Puducherry, India Developmental Pediatrics unit, Christian Medical College Hospital, Vellore, India Mahatma Gandhi Medical College and Research Institute Puducherry, India Background and Objectives: To determine whether vestibular stimulation offered by Indian hammock and music intervention are useful in reducing the occurrence</p>	INT	JUL TO DEC	Developmental Pediatrics Unit	SCOPUS

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	of infantile colic in term infants. Methods: This open-labelled randomized clinical trial was conducted among 465 term neonates who were randomly assigned to one of three groups: music group, hammock group and control group. The music intervention was given for a cumulative duration of at least 4 h a day with one stretch of at least 1 h. In the hammock group, babies were put to sleep inside the Indian hammock and were swung gently until they sleep, and were allowed to sleep in it, until they wake up. For the control group, routine pre-discharge counselling was given. All parents were provided a cry log and were instructed to record the log of cry events and duration. The primary outcome measure was occurrence of infantile colic episode as defined by ROME IV criteria. The infants were followed up from birth until the age of 3.5 months, and the cry log was collected during each follow-up visit. Results: Of the 435 term neonates who completed follow-up, 59 infants developed infantile colic (13.6%). The prevalence of infantile colic in the control group, music group and the Indian hammock group was 25.6%, 5.4% and 9.6% respectively; there was a significant reduction in the prevalence of infantile colic in the intervention groups as compared to the control group. Conclusions: Vestibular stimulation by Indian hammock and music intervention individually reduced the occurrence of infantile colic. © 2019 King Faisal Specialist Hospital & Research Centre (General Organization), Saudi Arabia				
516.	<p>Ravindra, N., Athiyarath, R., S, E., S, S., Kulkarni, U., N, A. F., Korula, A., Shaji, R. V., George, B. and Edison, E. S.</p> <p>Novel frameshift variant (c.409dupG) in SLC25A38 is a common cause of congenital sideroblastic anaemia in the Indian subcontinent</p> <p>J Clin Pathol; 2020, Address: Department of Haematology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Department of Haematology, Christian Medical College, Vellore, Tamil Nadu, India eunice@cmcvellore.ac.in.</p> <p>AIMS: Congenital sideroblastic anaemias (CSAs) are a group of rare disorders with the presence of ring sideroblasts in the bone marrow. Pathogenic variants are inherited in an autosomal recessive/X-linked fashion. The study was aimed at characterising the spectrum of mutations in SLC25A38 and ALAS2 genes in sideroblastic anaemia patients, exploring the genotype-phenotype correlation and identifying the haplotype associated with any recurrent mutation. PATIENTS AND METHODS: Twenty probable CSA patients were retrospectively analysed for genetic variants in ALAS2 and SLC25A38 genes by direct bidirectional sequencing. Real-time PCR was used to quantify gene expression in a case with promoter region variant in ALAS2. Three single nucleotide polymorphisms were used to establish the haplotype associated with a recurrent variant in the SLC25A38 gene. RESULTS: Six patients had causative variants in ALAS2 (30%) and 11 had variants in SLC25A38 (55%). The ALAS2 mutated cases presented at a significantly later age than the SLC25A38 cases. A frameshift variant in SLC25A38 (c.409dupG) was identified in six unrelated patients and was a common variant in our population exhibiting 'founder effect'. CONCLUSION: This is the largest series of sideroblastic</p>	INT	JUL TO DEC	Haematology	PMID: 32605921

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
517.	<p>anaemia cases with molecular characterisation from the Indian subcontinent.</p> <p>Reddy, S. N., Nair, N. P., Tate, J. E., Thiyagarajan, V., Giri, S., Paraharaj, I., Mohan, V. R., Babji, S., Gupte, M. D., Arora, R., Bidari, S., Senthamizh, S., Mekala, S., Goru, K. B., Reddy, B., Pamu, P., Gorthi, R. P., Badur, M., Mohan, V., Sathpathy, S., Mohanty, H., Dash, M., Mohakud, N. K., Ray, R. K., Mohanty, P., Gathwala, G., Chawla, S., Gupta, M., Gupta, R., Goyal, S., Sharma, P., Mathew, M. A., Jacob, T. J. K., Sundaram, B., Purusothaman, G. K. C., Dorairaj, P., Jagannatham, M., Murugiah, K., Boopathy, H., Maniam, R., Gurusamy, R., Kumaravel, S., Shenoy, A., Jain, H., Goswami, J. K., Wakhlu, A., Gupta, V., Vinayagamurthy, G., Parashar, U. D. and Kang, G.</p> <p>Intussusception after Rotavirus Vaccine Introduction in India New England Journal of Medicine; 2020, 383 (20): 1932-1940</p> <p>Address: [Reddy, S. N.; Nair, N. P.; Thiyagarajan, V; Giri, S.; Paraharaj, I; Babji, S.; Bidari, S.; Senthamizh, S.; Kang, G.] Wellcome Trust Res Lab, Div Gastrointestinal Sci, Vellore, Tamil Nadu, India. [Mohan, V. R.] Dept Community Hlth, Vellore, Tamil Nadu, India. [Jacob, T. J. K.] Christian Med Coll Vellore, Vellore, Tamil Nadu, India. [Vinayagamurthy, G.] Govt Vellore Med Coll, Vellore, Tamil Nadu, India. [Sundaram, B.] Kanchi Kamakoti Child Trust Hosp, Chennai, Tamil Nadu, India. [Purusothaman, G. K. C.] Natl Inst Epidemiol, Chennai, Tamil Nadu, India. [Dorairaj, P.; Jagannatham, M.] Inst Child Hlth, Chennai, Tamil Nadu, India. [Murugiah, K.; Boopathy, H.] Govt Rajaji Hosp, Madurai, Tamil Nadu, India. [Murugiah, K.; Boopathy, H.] Madurai Med Coll, Madurai, Tamil Nadu, India. [Maniam, R.; Gurusamy, R.] Coimbatore Med Coll, Coimbatore, Tamil Nadu, India. [Giri, S.; Paraharaj, I] Indian Council Med Res, New Delhi, India. [Gupte, M. D.; Arora, R.; Kang, G.] Translat Hlth Sci & Technol Inst, Faridabad, India. [Mekala, S.] Kurnool Med Coll, Kurnool, Andhra Pradesh, India. [Mekala, S.] Govt Gen Hosp, Kurnool, Andhra Pradesh, India. [Goru, K. B.; Reddy, B.] Govt Gen Hosp, Kakinada, Andhra Pradesh, India. [Goru, K. B.; Reddy, B.] Rangaraya Med Coll, Kakinada, Andhra Pradesh, India. [Pamu, P.; Gorthi, R. P.] King George Hosp, Visakhapatnam, Andhra Pradesh, India. [Pamu, P.; Gorthi, R. P.] Andhra Med Coll, Visakhapatnam, Andhra Pradesh, India. [Badur, M.; Mohan, V] Sri Venkateshwara Med Coll, Tirupati, Andhra Pradesh, India. [Sathpathy, S.; Mohanty, H.] Sardar Valla Bhai Patel Post Grad Inst Paediat, Cuttack, India. [Dash, M.] Inst Med Sci, Bhubaneswar, India. [Dash, M.] SUM Hosp, Bhubaneswar, India. [Mohakud, N. K.] Kalinga Inst Med Sci, Bhubaneswar, India. [Ray, R. K.; Mohanty, P.] Hitech Hosp, Bhubaneswar, India. [Gathwala, G.] Pandit Bhagwat Dayal Sharma Post Grad Inst Med, Rohtak, Haryana, India. [Chawla, S.] Shaheed Hasan Khan Mewati Govt Med Coll, Mewat, India. [Gupta, M.] Post Grad Inst Med Educ & Res, Chandigarh, India. [Gupta, R.] Sawai Man Singh Med Coll, Jaipur, Rajasthan, India. [Goyal, S.] Rabindranath Tagore Med Coll, Udaipur, Rajasthan, India. [Sharma, P.] Dr Sampurnanand Med Coll, Jodhpur, Rajasthan, India. [Mathew, M. A.] Malankara Orthodox Syrian Church Med Coll Hosp, Kolencherry, Kerala, India. [Kumaravel, S.; Shenoy, A.] Jawaharlal Nehru Inst Postgrad Med Educ & Res, Pondicherry, India. [Jain, H.] Mahatma Gandhi Mem Med Coll, Indore, India. [Goswami, J. K.] Govt Med Coll, Gauhati, Assam, India. [Wakhlu, A.] King George Med Coll, Lucknow, Uttar</p>	INT	JUL TO DEC	Gastrointestinal Surgery, Clinical Virology	WOS:000588782400010

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Pradesh, India. [Gupta, V] Banaras Hindu Univ, Inst Med Sci, Varanasi, Uttar Pradesh, India. [Tate, J. E.; Parashar, U. D.] Ctr Dis Control & Prevent, Atlanta, GA USA.</p> <p>Kang, G (corresponding author), Christian Med Coll Vellore, Div Gastrointestinal Sci, Ida Scudder Rd, Vellore 632004, Tamil Nadu, India. gkang@cmcvellore.ac.in</p> <p>BACKGROUND A three-dose, oral rotavirus vaccine (Rotavac) was introduced in the universal immunization program in India in 2016. A prelicensure trial involving 6799 infants was not large enough to detect a small increased risk of intussusception. Postmarketing surveillance data would be useful in assessing whether the risk of intussusception would be similar to the risk seen with different rotavirus vaccines used in other countries. METHODS We conducted a multicenter, hospital-based, active surveillance study at 27 hospitals in India. Infants meeting the Brighton level 1 criteria of radiologic or surgical confirmation of intussusception were enrolled, and rotavirus vaccination was ascertained by means of vaccination records. The relative incidence (incidence during the risk window vs. all other times) of intussusception among infants 28 to 365 days of age within risk windows of 1 to 7 days, 8 to 21 days, and 1 to 21 days after vaccination was evaluated by means of a self-controlled case-series analysis. For a subgroup of patients, a matched case-control analysis was performed, with matching for age, sex, and location. RESULTS From April 2016 through June 2019, a total of 970 infants with intussusception were enrolled, and 589 infants who were 28 to 365 days of age were included in the self-controlled case-series analysis. The relative incidence of intussusception after the first dose was 0.83 (95% confidence interval [CI], 0.00 to 3.00) in the 1-to-7-day risk window and 0.35 (95% CI, 0.00 to 1.09) in the 8-to-21-day risk window. Similar results were observed after the second dose (relative incidence, 0.86 [95% CI, 0.20 to 2.15] and 1.23 [95% CI, 0.60 to 2.10] in the respective risk windows) and after the third dose (relative incidence, 1.65 [95% CI, 0.82 to 2.64] and 1.08 [95% CI, 0.69 to 1.73], respectively). No increase in intussusception risk was found in the case-control analysis. CONCLUSIONS The rotavirus vaccine produced in India that we evaluated was not associated with intussusception in Indian infants.</p>				
518.	<p>Reddy, Y. M., Lepcha, A., Augustine, A. M., Philip, A. and Thomas, P. Standard Programming of Retrograde Electrode Insertion via Middle-Turn Cochleostomy in Labyrinthitis Ossificans Ear Nose Throat J; 2020, 145561320974864 Address: Department of Otorhinolaryngology, Otology, Neurotology and Cochlear Implant Unit, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Successful cochlear implantation in the setting of labyrinthitis ossificans is challenging. Various surgical techniques are described to circumvent the region of ossification and retrograde insertion of the electrode array is one such option. While reverse programming is often recommended in the case of retrograde electrode insertion, we present our experience of retrograde electrode insertion</p>	INT	JUL TO DEC	Otorhinolaryngology, Otology, Neurotology and Cochlear Implant Unit	PMID: 33226852

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	for labyrinthitis ossificans, where standard programming was adopted due to patient preference and provided satisfactory outcomes.				
519.	<p>Regina, D. L., Kanagalakshmi, V. and Alex, R. G. Profile, risk factors and outcome of occupational injuries reported to the emergency department in a tertiary care hospital in South India J Family Med Prim Care; 2020, 9 (11): 5684-5688 Address: Department and Accident and Emergency Medicine, Christian Medical College, Vellore, Tamil Nadu, India. Community Medicine, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND: India is an industrialised country and most work is labour intensive. There is very scarce data on occupation related injuries. AIM: To evaluate the prevalence, profile, severity and risk factors for occupational injuries presenting to the emergency medicine department of a tertiary care hospital. MATERIALS AND METHODS: A cross-sectional study was done in the emergency department of Christian Medical College, Vellore among the patients who presented with occupational injuries. The risk factors for occupational injuries like age, gender, shift work, work experience and type of work and their severity and outcome were evaluated. RESULTS: Older age group, working in shift duty, working longer hours were significant risk factors for occupational injuries. CONCLUSION: Training and use of safety protective measures will decrease occupational injuries.</p>	NAT	JUL TO DEC	Accident and emergency Medicine, Community Medicine	PMID:33532414 PMC ID:7842461
520.	<p>Reichheld, A., Mukherjee, P. K., Rahman, S. M. F., David, K. V. and Pricilla, R. A. Prevalence of Cervical Cancer Screening and Awareness among Women in an Urban Community in South India-A Cross Sectional Study Annals of Global Health; 2020, 86 (1): 7</p> <p>Address: [Reichheld, Alyse] Tufts Univ, Sch Med, Boston, MA 02111 USA. [Mukherjee, Pavan Kumar] Christian Med Coll & Hosp, Dept Med Social Works, Low Cost Effect Care Unit, Vellore, Tamil Nadu, India. [Rahman, Sajitha M. F.; David, Kirubah, V] Christian Med Coll & Hosp, Dept Family Med, Low Cost Effect Care Unit, Vellore, Tamil Nadu, India. [Pricilla, Ruby Angeline] Christian Med Coll & Hosp, Dept Community Med, Low Cost Effect Care Unit, Vellore, Tamil Nadu, India. Pricilla, RA (reprint author), Christian Med Coll & Hosp, Dept Community Med, Low Cost Effect Care Unit, Vellore, Tamil Nadu, India. rubykarl@yahoo.com</p> <p>Background: Although the incidence of cervical cancer has declined in developed countries, cervical cancer remains a major problem in those that are developing. Past studies suggest that Indian women, who account for at least one-fourth of the global disease burden, are not routinely screened. Objectives: Among the women living in our low-income urban community in South India, we sought to determine the prevalence of screening and to assess women's knowledge of cervical cancer. Methods: We conducted a community-based cross-sectional survey evaluating</p>	INT	JAN TO JUN	Low Cost Effective Care Unit, Family Medicine, Community Medicine	PMID:32211300 PMC ID: PMC7082824 WOS:000525406800001 SCOPUS H-INDEX:61 IF: 2.037 (Publisher Site)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>cancer screening prevalence among women aged 25-65 living in the communities served by our clinic. We also assessed knowledge of cervical cancer, screening and the HPV vaccine in a subset of 175 women in the same age range. Findings: Prevalence data was available for 1033 women. Of these, 14.3% had at least one lifetime pelvic exam and 7.1% had undergone cervical cancer screening. Women who were married below the age of 18, who belonged to non-Hindu religion, and who were from a higher socioeconomic status were more likely to be screened. Women who were single did not undergo screening. With regard to knowledge of cervical cancer, 84.6% of women had poor knowledge, 10.3% had moderate knowledge, and 5.1% had good knowledge. Women aged 41 years or younger had better knowledge of the disease. Conclusions: Very few women are screened for cervical cancer and few have adequate knowledge of the disease within this South Indian community. These findings suggest opportunities for a community-based education and screening campaign to reduce the prevalence of cervical cancer within this population.</p>				
521.	<p>Rekhi, B., Kattoor, J., Jennifer, A., Govindarajan, N., Uppin, S., Jambhekar, N. A., Jojo, A., Chatterjee, U., Banerjee, D. and Singh, P. Grossing and reporting of a soft tissue tumor specimen in surgical pathology: Rationale, current evidence, and recommendations Indian J Cancer. 2020 Nov 24. doi: 10.4103/ijc.IJC_738_20. Online ahead of print.</p> <p>Address: Department of Surgical Pathology, Bone and Soft Tissues, Disease Management Group, Tata Memorial Hospital, Homi Bhabha National Institute University, Mumbai, Maharashtra, India. Department of Pathology, Regional Cancer Centre, Thiruvananthapuram, Kerala, India. Department of Pathology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Pathology, Dr Kamkashi Memorial Hospitals, Chennai, Tamil Nadu, India. Department of Pathology, Nizam's Institute of Medical Sciences, Hyderabad, Telangana, India. Formerly, Department of Surgical Pathology, Tata Memorial Hospital, Mumbai, Maharashtra, India. Department of Pathology, Institute of Post-Graduate Medical Education and Research and Seth Sukhlal Karnani Memorial Hospital, Kolkata, West Bengal, India. Department of Pathology, Amrita Institute of Medical Sciences, Kochi, Kerala, India. Department of Pathology, Narayana Super Speciality Hospital, Howrah, Kolkata, West Bengal, India. Department of Pathology, Ram Manohar Lohia Hospital, Lucknow, Uttar Pradesh, India. Soft tissue tumors, including sarcomas are complex and diagnostically challenging tumors. This is as a result of their heterogeneity and overlapping</p>	NAT	JUL TO DEC	Pathology	PMID:33402595

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>clinicopathological, immunohistochemical and also molecular features, the latter to some extent. More than 80 types of sarcoma have been described. Current management, which is best offered at centers with active multidisciplinary care, is based on balancing oncologic and functional outcomes in such cases. This has transcended into the types of specimens received for grossing these rather uncommon tumors. Over the years, diagnostic specimens have reduced in their sizes from, open biopsies to core needle biopsies. These specimens need to be adequately and judiciously triaged for ancillary techniques, such as molecular testing. Conservative surgeries have led to resected specimens for marginal assessment. Lately, post neoadjuvant (chemotherapy or radiation therapy)-treated resection specimens of soft tissue sarcomas are being submitted for surgical pathology reporting. This article focuses on the grossing of soft tissue tumors, including sarcomas, in terms of types of specimens, grossing techniques including rationale, tissue triage, reporting, and recommendations from the surgical pathologists actively engaged in reporting musculoskeletal tumors, based on current evidence.</p>				
522.	<p>Richardson, A. L., Baskind, N. E., Karuppusami, R. and Balen, A. H. Effect of deprivation on in vitro fertilisation outcome: a cohort study BJOG: An International Journal of Obstetrics and Gynaecology; 2020, 127 (4): 458-465</p> <p>Address: Leeds Fertility, Seacroft Hospital, Leeds Teaching Hospitals NHS Trust, Leeds, United Kingdom Department of Biostatistics, Christian Medical College and Hospital, Vellore, India</p> <p>Objective: To determine whether socioeconomic deprivation affects IVF outcome independent of the number of cycles undertaken. Design: A retrospective review of prospectively collected data. Setting: A tertiary level fertility clinic in the North of England. Population: All participants undergoing their first fresh single-embryo transfer, funded by the National Health Service (NHS), between January 2012 and December 2017. Methods: For each case, identified from the clinic database, we recorded the following: age; body mass index; FSH; number of eggs retrieved; ethnicity; cause of subfertility; stage of embryo transfer; and whether any adjuncts i.e. EmbryoGlue® or Time Lapse Imaging were used. Socio-economic deprivation was assessed using the Index of Multiple Deprivation (IMD) determined by the residential postcode. Main outcome measures: Clinical pregnancy (CP) and live birth (LB) rates across IMD quintiles. Results: Three thousand ninety-one women were included. Overall, CP and LB rates were 35.9% and 31.3% respectively. CP rates increased significantly from 31.0% in the most deprived group to 38.8% in the least deprived group (P < 0.01). Similarly, LB rates were significantly lower in the most deprived group compared with the least deprived group (26.8 versus 35.4%, P < 0.01). After adjusting for confounding variables, women in the least</p>	INT	JAN TO JUN	Biostatistics	<p>SCOPUS H-INDEX:156 IF: 5.193 BIOXBIO (2018/2019)</p>

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	deprived group were significantly more likely to have a LB (aRR 1.18, 95% CI 1.00–1.39) than women in the most deprived group. Conclusions: More socio-economically deprived patients are significantly less likely to achieve a LB than less deprived patients independent of the number of cycles of IVF undertaken. Tweetable abstract: More deprived patients are less likely to have a LB per cycle of IVF than less deprived patients. © 2019 Royal College of Obstetricians and Gynaecologists				
523.	Riju, J., George, N. A. and Krishna, J. AJCC 8th Versus AJCC 7th as a Prognostic Indicator in Buccal Mucosal Squamous Cell Carcinoma Indian Journal of Surgical Oncology; 2020, Address: Department of Head and Neck Surgery, Christian Medical College, Vellore, India Department of Surgical Oncology, Regional Cancer Centre, Trivandrum, Kerala 695011, India Department of Biostatistics, Regional Cancer Centre, Trivandrum, India American Joint Committee for Cancer (AJCC) staging manual has been recently updated with 8th edition which led to an immense shift in the tumor, node, and composite stages, in comparison to the previous staging. This was mainly due to the incorporation of depth of invasion (DOI) and extranodal extension (ENE) in staging. The impact of new staging system is widely studied as combined subsites in oral cancer. This study is to focus on a single subsite of oral cavity which is known for its poor prognosis. We evaluated 109 patients who had buccal mucosal squamous cell carcinomas (BSCC) who underwent treatment, with a curative intend, between 2014 and 2015. Clinical records were reviewed and the tumors were re-staged as per 8th edition of AJCC; disease-free survival (DFS) was also analyzed. Our study population had a mean age of 54.5 ± 10.35 years and male to female ratio of 4:1. During a median follow-up of 41 months, 35 patients (32.1%) developed recurrence. There was a statistically significant shift in stages between AJCC 7th edition against AJCC 8th edition leading to 34% upshift in T-stage, 43.1% upshift in N-stage, eventually leading to a 23.9% upshift in the composite stage. Tumors which got upgraded due to upshift in nodal stage had a poor survival (p = 0.002). Newer staging system is easy to use in clinical practice. Around a quarter of the BSCC got upstaged with the introduction of the newer staging system. But it was surprising to note that there were no statistically significant differences in DFS between the tumors of the same composite stages with regard to the two staging systems. © 2020, Indian Association of Surgical Oncology.	NAT	JAN TO JUN	Head and Neck Surgery	SCOPUS H-INDEX:19 IF: 0.550 BIOXBIO (2018/2019)
524.	Riju, J., George, N. A., Mony, R. P., Krishna, J. and Rajan, R. A Prospective Study to Find the Significance of Delphian Nodal Metastasis in Papillary Carcinoma Thyroid Indian Journal of Surgery; 2020, 82 (1): 19-24	NAT	JAN TO JUN	Endocrinology	WOS:000516635800005 H-INDEX:14 IF: 0.610 RESURCHIFY (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Address: [Riju, Jeyashanth] Reg Canc Ctr, Head & Neck Surg Oncol, Trivandrum, Kerala, India. [George, Nebu Abraham] Reg Canc Ctr, Dept Surg Oncol, Trivandrum 695011, Kerala, India. [Mony, Rari P.] Reg Canc Ctr, Dept Pathol, Trivandrum, Kerala, India. [Krishna, Jagathnath] Reg Canc Ctr, Dept Biostat, Trivandrum, Kerala, India. [Rajan, Remya] Christian Med Coll & Hosp, Dept Endocrinol, Vellore, Tamil Nadu, India.</p> <p>George, NA (reprint author), Reg Canc Ctr, Dept Surg Oncol, Trivandrum 695011, Kerala, India. jjriju@yahoo.co.in; georgeabe@gmail.com; raribiju@gmail.com; jagath.krishna@gmail.com; remsss.rajan@gmail.com</p> <p>Delphian node (DLN) involvement is well known for its poor prognosis in laryngeal malignancies. With less than 10 studies available with respect to DLN and carcinoma thyroid, this prospective study to analyze the significance of DLN in management of thyroid carcinoma was planned. Study included 151 patients with histopathologically proven papillary carcinoma thyroid. Histopathological factors analyzed included size of the tumor, isthmus involvement, tumor capsule involvement, extrathyroidal extension, multifocality, lymphovascular invasion, thyroiditis, and pyramidal lobe association. DLN was harvested in 80 patients (53%). Seventeen patients (21.25%) had DLN metastasis. Male gender, capsular involvement, and extrathyroidal extension were independently associated with metastatic in DLN. DLN metastasis had accuracy of 83.8% to predict central compartment neck nodal involvement, risk of which is increased by 24.7 times compared to DLN with no nodal metastasis. Similarly, DLN metastasis is associated with an accuracy of 81.3% to predict lateral compartment neck nodal involvement risk of which is increased by 9.8 times compared to DLN with no nodal metastasis, both of which showed a significant p value of 0.0001. DLN involvement is a predictor of nodal metastasis which mandates an aggressive treatment and a close follow-up. When DLN is involved with total thyroidectomy with central compartment neck dissection has to be performed and lateral neck dissection is preferred on the side of disease when DLN is involved with capsular invasion, extrathyroidal extension and in case of male gender, after radiological correlation.</p>				
525.	<p>Riju, J., George, P., Vidya, K. and Tirkey, A. J.</p> <p>Bilateral total conservative parotidectomy: a tale behind an aesthetic surgery BMJ case reports; 2020, 13 (12): Address: Department of Head & Neck Surgery, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India jjriju@yahoo.co.in.</p> <p>Department of Head & Neck Surgery, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India.</p> <p>Any facial swelling is associated with stress for the patient due to cosmesis. Especially when one has bilateral symmetrical enlarged parotids, having exhausted all available conservative management, surgery becomes the last resort; which in such cases pose specific challenges. A 29-year-old man presented with problems of bilateral symmetrical enlarged parotid lesion for 5 years, which did not have an</p>	INT	JUL TO DEC	Head & Neck Surgery	PMID: 33298480 PMC:7733104

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	adequate response to medical line of management. He underwent proposed surgery and was diagnosed to have chronic sclerosing parotitis (CSS). The challenges faced during surgery of this non-neoplastic inflammatory lesion, with significant fibrosis, is being described. He recovered completely without any complications related to surgery. CSS rarely affects bilateral parotid glands. Surgery, results of which are outstanding, must be considered in cases where these lesions do not respond to medical line of management. Bilateral total conservative parotidectomy with sternocleidomastoid flap reconstruction provides excellent aesthesis and improves quality of life.				
526.	<p>Rogawski Mcquade, E. T., Liu, J., Kang, G., Kosek, M. N., Lima, A. A. M., Bessong, P. O., Samie, A., Haque, R., Mduma, E. R., Shrestha, S., Leite, J. P., Bodhidatta, L., Iqbal, N., Page, N., Kiwelu, I., Bhutta, Z., Ahmed, T., Houpt, E. R. and Platts-Mills, J. A.</p> <p>Protection from Natural Immunity against Enteric Infections and Etiology-Specific Diarrhea in a Longitudinal Birth Cohort</p> <p>Journal of Infectious Diseases; 2020, 222 (11): 1858-1868</p> <p>Address: Department of Public Health Sciences, University of Virginia, Charlottesville, VA, United States Division of Infectious Diseases and International Health, University of Virginia, Charlottesville, VA, United States Christian Medical College, Vellore, India Asociación Benéfica PRISMA, Iquitos, Peru Federal University of Ceara, Fortaleza, Brazil University of Venda, Thohoyandou, South Africa International Centre for Diarrheal Disease Research, Dhaka, Bangladesh Haydom Global Health Research Centre, Haydom, Tanzania Walter Reed/AFRIMS Research Unit, Kathmandu, Nepal Fundação Oswaldo Cruz (Fiocruz), Rio de Janeiro, Brazil Armed Forces Research Institute of Medical Sciences (AFRIMS), Bangkok, Thailand Aga Khan University, Karachi, Pakistan National Institute for Communicable Diseases, Johannesburg, South Africa Kilimanjaro Clinical Research Institute, Moshi, Tanzania</p> <p>Background: The degree of protection conferred by natural immunity is unknown for many enteropathogens, but it is important to support the development of enteric vaccines. Methods: We used the Andersen-Gill extension of the Cox model to estimate the effects of previous infections on the incidence of subsequent subclinical infections and diarrhea in children under 2 using quantitative molecular diagnostics in the MAL-ED cohort. We used cross-pathogen negative control associations to correct bias due to confounding by unmeasured heterogeneity of exposure and susceptibility. Results: Prior rotavirus infection was associated with a 50% lower hazard (calibrated hazard ratio [cHR], 0.50; 95% confidence interval [CI], 0.41-0.62) of subsequent rotavirus diarrhea. Strong protection was evident against Cryptosporidium diarrhea (cHR, 0.32; 95% CI, 0.20-0.51). There was also protection due to prior infections for norovirus GII (cHR against diarrhea, 0.67;</p>	INT	JUL TO DEC	Gastrointestinal Sciences	SCOPUS

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	95% CI, 0.49-0.91), astrovirus (cHR, 0.62; 95% CI, 0.48-0.81), and Shigella (cHR, 0.79; 95% CI, 0.65-0.95). Minimal protection was observed for other bacteria, adenovirus 40/41, and sapovirus. Conclusions: Natural immunity was generally stronger for the enteric viruses than bacteria, potentially due to less antigenic diversity. Vaccines against major causes of diarrhea may be feasible but likely need to be more immunogenic than natural infection. © 2020 The Author(s) 2020. Published by Oxford University Press for the Infectious Diseases Society of America.				
527.	<p>Rose, J. S., Lalgudi, S., Joshua, A., Paul, J., Thambaiiah, A., Wankhar, S., Chacko, G., Kuriakose, T. and Korah, S. An experimental study to test the efficacy of Mesenchymal Stem Cells in reducing corneal scarring in an ex-vivo organ culture model Experimental Eye Research; 2020, 190 6</p> <p>Address: [Rose, Jeyanth Suresh; Lalgudi, Sharmili; Kuriakose, Thomas; Korah, Sanita] Christian Med Coll & Hosp, Dept Ophthalmol, Vellore 632002, Tamil Nadu, India. [Joshua, Aarwin; Paul, Joshua; Thambaiiah, Augustine] Christian Med Coll & Hosp, Ctr Stem Cell Res, Vellore, Tamil Nadu, India. [Wankhar, Syrpailyne] Christian Med Coll & Hosp, Dept Bioengn, Vellore, Tamil Nadu, India. [Chacko, Geeta] Christian Med Coll & Hosp, Dept Gen Pathol, Vellore, Tamil Nadu, India. Lalgudi, S (reprint author), Christian Med Coll & Hosp, Dept Ophthalmol, Vellore 632002, Tamil Nadu, India. shammi_8188@yahoo.com</p> <p>In this study, we evaluated the effect of placenta-derived Mesenchymal Stem Cells (MSCs) versus placebo in improving corneal transparency following experimental injury in an ex-vivo organ culture model of post-mortem human corneas. We also compared the influence of MSCs on the basic histopathology of the cornea and the immunohistochemistry markers of fibrotic corneal scarring. Mesenchymal Stem Cells extracted from the placenta were isolated and expanded in-vitro. Five pairs of post-mortem human corneas harvested for the corneal transplant of equal grade were included in the study. Corneas of the same pair were randomly assigned to either the case arm or the control arm. All corneas underwent a standardized superficial keratectomy, 4 mm in diameter. The case and control arm corneas received an intrastromal injection of MSCs and placebo respectively. The corneal button was maintained in an organ culture system for 28 days under the standard protocol. Laser light was passed through the corneas mounted on a self-styled modified artificial anterior chamber. Image analysis was used to quantify corneal transparency. Haematoxylin & Eosin staining and Immunohistochemistry was done for Alpha SMA (Smooth Muscle Actin). Laser scatter measurements were measured using Image Analysis (Image J Software). The difference in the mean of Full-Width Half Maximum (FWHM), Max intensity and Red pixel intensity between the cases and the controls was 101.5, 16.3 and 11.4 respectively which was found</p>	Int	JAN TO JUN	Ophthalmology, Centre for Stem Cell Research, Bioengineering, General Pathology	<p>WOS:000508286600028 SCOPUS H-INDEX:119 IF: 2.998 BIOXBIO (2018/2019)</p>

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	to be statistically significant ($P < 0.05$). Histopathology showed a disorganized Bowman's layer in the controls as compared to the cases. Alpha Smooth Muscle Actin at the injury site stained 3 + in all controls as compared to 1 + in the cases, showing a statistically significant difference ($p = 0.005$). Based on our findings, we consider that placenta-derived Mesenchymal Stem Cells can alter evolving corneal scarring into a more favourable outcome with better corneal transparency and lesser fibrotic corneal scarring.				
528.	Rose, J. S., Lalgudi, S., Joshua, R. A., Paul, J., Susanne, M. A., Phillips, A. C., Jeyaraj, C., Abraham, G., Joshua, R., Vinay, S., Paul, P., Amritanand, A. and Nadaraj, A. A validated audio-visual educational module on examination skills in ophthalmology for undergraduate medical students in the COVID-19 season - An observational longitudinal study Indian J Ophthalmol; 2020, Address: Department of Ophthalmology, Christian Medical College, Vellore , Tamil Nadu, India. PURPOSE: The aim of this study was to assess the impact of an audio visual (AV) teaching module on basic torchlight examination of the eye and direct ophthalmoscopy for undergraduate medical students. METHODS: This observational longitudinal study was done on 33 consecutive medical interns during their Ophthalmology posting from December 2019 to March 2020 at a medical college in South-India. An AV-module was created using animation graphics, narratives, demonstrations on normal individuals and on patients with positive signs. All interns had a pretest consisting of Multiple-choice questions, (MCQs) and an Objective Structured Clinical Examination (OSCE) on torchlight examination and direct ophthalmoscopy (DO). They were then shown the 20-minute AV-module. A posttest was performed immediately and after one week. RESULTS: The mean pretest MCQ score was 5.84 ± 1.98 . It improved to 8.81 ± 1.15 in the immediate posttest and 8.87 ± 1.66 in the one-week posttest. The mean pretest OSCE score was 12.21 ± 3.39 . It improved to 23.21 ± 3.39 in the immediate posttest and 23.90 ± 3.7 in the one-week posttest. Using Generalized Estimating Equation, MCQ score improved by 2.97 units and 3.03 units and the OSCE score improved by 11 units and 11.69 units in the immediate posttest and one-week posttest respectively when compared to the pretest corresponding to the MCQ score and OSCE score ($p < 0.001$). CONCLUSION: AV teaching modules-for torchlight examination and DO has a significant benefit in improving knowledge and skill in undergraduate medical students. These significant results have the great translatory capacity in the current COVID-19 pandemic, where physical demonstrations involving close proximity and groups of students are highly risk prone.	NAT	JUL TO DEC	Ophthalmology	PMID: 33380618
529.	Rosenthal, V. D., Bat-Erdene, I., Gupta, D., Rajhans, P., Myatra, S. N., Muralidharan, S., Mehta, Y., Rai, V., Hung, N. V., Luxsuwong, M., Tapang, A. R. D., Guo, X. Q., Trotter, A., Kharbanda, M., Rodrigues, C., Dwivedy, A., Shah, S., Poojary, A., Todi, S. K., Chabukswar, S., Bhattacharyya, M., Ramachandran, B., Ramakrishnan, N., Purkayasta, S. K., Sakle, A. S., Kumar, S., Warriar, A. R., Kavathekar, M. S., Sahu, S.,	INT	JAN TO JUN	Vascular Surgery	WOS:000533094900001 SCOPUS H-INDEX:104 IF: 1.971 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Mubarak, A., Modi, N., Jaggi, N., Gita, N., Mishra, S. B., Sahu, S., Jawadwala, B., Zala, D., Zompa, T., Mathur, P., Nirkhivale, S., Vadi, S., Singh, S., Agarwal, M., Sen, N., Karlekar, A., Punia, D. P., Kumar, S., Gopinath, R., Nair, P. K., Gan, C. S., Chakravarthy, M., Sandhu, K., Kambam, C., Mohanty, S. K., Varaiya, A., Pandya, N., Subhedar, V. R., Vanajakshi, M. R., Singla, D., Tuvshinbayar, M., Patel, M., Ye, G. X., Lum, L. C. S., Zaini, R. H. M., Batkhuu, B., Dayapera, K. M., Nguyet, L. T., Berba, R., Buenaflor, M. C. S., Ng, J. A., Siriyakorn, N. and Thu, L. T. A.</p> <p>Six-year study on peripheral venous catheter-associated BSI rates in 262 ICUs in eight countries of South-East Asia: International Nosocomial Infection Control Consortium findings Journal of Vascular Access; 8</p> <p>Address: [Rosenthal, Victor Daniel] Int Nosocomial Infect Control Consortium INICC, 11 Septiembre 4567, Floor 12, Apt 1201, RA-1429 Buenos Aires, DF, Argentina. [Bat-Erdene, Ider] Infect Control Profess, Ulaanbaatar, Mongolia. [Bat-Erdene, Ider] Intermed Hosp, Ulaanbaatar, Mongolia. [Gupta, Debkishore] BM Birla Heart Res Ctr, Kolkata, India. [Gupta, Debkishore] Calcutta Med Res Inst, Kolkata, India. [Rajhans, Prasad] Deenanath Mangeshkar Hosp, Pune, Maharashtra, India. [Myatra, Sheila Nainan] Tata Mem Hosp, Homi Bhabha Natl Inst, Dept Anaesthesiol Crit Care & Pain, Mumbai, Maharashtra, India. [Muralidharan, S.] G Kuppuswamy Naidu Mem Hosp, Coimbatore, Tamil Nadu, India. [Mehta, Yatin] Medanta Medicity, New Delhi, India. [Rai, Vineya] Univ Malaya, Adult Intens Care Unit, Med Ctr, Kuala Lumpur, Malaysia. [Nguyen Viet Hung] Bach Mai Hosp, Hanoi, Vietnam. [Luxsuwong, Montri] Phyathai I Hosp, Pathum Thani, Thailand. [Tapang, Audrey Rose D.] Cardinal Santos Med Ctr, San Juan, Philippines. [Guo, Xiuqin] Dong E Peoples Hosp, Donge Cty, Shandong, Peoples R China. [Trotter, Andrew] Grande Int Hosp, Kathmandu, Nepal. [Kharbanda, Mohit] Desun Hosp, Kolkata, India. [Rodrigues, Camilla] PD Hinduja Natl Hosp & Med Res Ctr, Mumbai, Maharashtra, India. [Dwivedy, Arpita] Dr LH Hiranandani Hosp, Mumbai, Maharashtra, India. [Shah, Sweta] Kokilaben Dhirubhai Ambani Hosp & Med Res Inst, Mumbai, Maharashtra, India. [Poojary, Aruna] Breach Candy Hosp Trust, Mumbai, Maharashtra, India. [Todi, Subhash Kumar] Adv Medicare Res Inst Dhakuria Unit, Kolkata, India. [Chabukswar, Supriya] Noble Hosp, Pune, Maharashtra, India. [Bhattacharyya, Mahuya] Adv Medicare Res Inst Mukundapur Unit, Kolkata, India. [Ramachandran, Bala] Kanchi Kamakoti Childs Trust Hosp, Chennai, Tamil Nadu, India. [Ramakrishnan, Nagarajan] Apollo Main Hosp, Chennai, Tamil Nadu, India. [Purkayasta, Sujit Kar] Peerless Hosp Res Ctr Ltd, Kolkata, India. [Sakle, Asmita Sagar] Bombay Hosp & Med Res Ctr, Mumbai, Maharashtra, India. [Kumar, Siva] Kovai Med Ctr & Hosp, Coimbatore, Tamil Nadu, India. [Warrier, Anup R.] Aster Medcity, Kochi, Kerala, India. [Kavathekar, Maithili Satish] Sahyadri Special Hosp, Pune, Maharashtra, India. [Sahu, Samir] Kalinga Hosp, Bhubaneswar, India. [Mubarak, Aisha] Kerala Inst Med Sci, Thiruvananthapuram, Kerala, India. [Modi, Nikhil] Indraprastha Apollo Hosp, New Delhi, India. [Jaggi, Namita] Artemis Hlth Inst, New Delhi, India. [Gita, Nadimpalli] Rao Nursing Home, Pune, Maharashtra,</p>				

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	<p>India. [Mishra, Shakti Bedanta] IMS & SUM Hosp, Bhubaneswar, India. [Sahu, Suneeta] Apollo Hosp, Bhubaneswar, India. [Jawadwala, Burhan] Saifee Hosp, Mumbai, Maharashtra, India. [Zala, Dolatsinh] Shri Vinoba Bhawe Civil Hosp, Silvassa, India. [Zompa, Tenzin] Max Super Special Hosp, Dehra Dun, Uttarakhand, India. [Mathur, Purva] AIIMS, JPNA Trauma Ctr, New Delhi, India. [Nirkiwale, Suhas] Greater Kailash Hosp, Indore, India. [Vadi, Sonali] Global Hosp, Mumbai, Maharashtra, India. [Singh, Sanjeev] Amrita Inst Med Sci & Res Ctr, Kochi, Kerala, India. [Agarwal, Manoj] Belle Vue Clin, Kolkata, India. [Sen, Nagamani] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Karlekar, Anil] Escorts Heart Inst & Res Ctr, New Delhi, India. [Punia, D. P.] Mahatma Gandhi Hosp, Jaipur, Rajasthan, India. [Kumar, Suresh] Apollo Childrens Hosp, Chennai, Tamil Nadu, India. [Gopinath, Ramachadran] Nizams Inst Med Sci, Hyderabad, India. [Nair, Pravin Kumar] Holy Spirit Hosp, Mumbai, Maharashtra, India. [Gan, Chin Seng] Pusat Perubatan Univ Kebangsaan Malaysia, Kuala Lumpur, Malaysia. [Chakravarthy, Murali] Fortis Hosp, Bangalore, Karnataka, India. [Sandhu, Kavita] Max Super Special Hosp, New Delhi, India. [Kambam, Chandrika] Columbia Asia Hosp Patiala, Patiala, Punjab, India. [Mohanty, Salil Kumar] AMRI Hosp, Bhubaneswar, India. [Varaiya, Ami] Dr Balabhai Nanavati Super Special Hosp, Mumbai, Maharashtra, India. [Pandya, Nirav] Bhailal Amin Gen Hosp, Vadodara, India. [Subhedar, Vaibhavi R.] Bombay Hosp Indore, Mumbai, Maharashtra, India. [Vanajakshi, M. R.] Columbia Asia Referral Hosp Yeshwanthpur, Bangalore, Karnataka, India. [Singla, Deepak] Maharaja Agrasen Hosp, New Delhi, India. [Tuvshinbayar, M.] Second Gen Hosp, Ulaanbaatar, Mongolia. [Patel, Mayur] Sir HN Reliance Fdn Hosp & Res Ctr, Mumbai, Maharashtra, India. [Ye, Guxiang] Yangpu Hosp, Shanghai, Peoples R China. [Lum, Lucy Chai See] Univ Malaya, Pediat Intens Care, Med Ctr, Kuala Lumpur, Malaysia. [Zaini, Rhendra Hardy Mohamad] Hosp Univ Sains Malaysia, Intens Care Unit, Kubang Kerian, Malaysia. [Batkhuu, Byambadorj] Cent State Hosp I, Ulaanbaatar, Mongolia. [Dayapera, Kimberley M.] Healthserv Los Banos Med Ctr, Los Banos, Philippines. [Le Thu Nguyet] Thanh Nhan Hosp, Hanoi, Vietnam. [Berba, Regina] Philippine Gen Hosp, Manila, Philippines. [Buenaflor, Maria Carmen S. G.] Philippine Heart Ctr, Manila, Philippines. [Ng, Josephine Anne] St Lukes Med Ctr Quezon City, Manila, Philippines. [Siriyaorn, Nirada] Phythai I Hosp, Bangkok, Thailand. [Le Thi Anh Thu] Cho Ray Hosp, Ho Chi Minh City, Vietnam.</p> <p>Rosenthal, VD (reprint author), Int Nosocomial Infect Control Consortium INICC, 11 Septiembre 4567, Floor 12, Apt 1201, RA-1429 Buenos Aires, DF, Argentina. victor_rosenthal@inicc.org</p> <p>Background: Short-term peripheral venous catheter-associated bloodstream infection rates have not been systematically studied in Asian countries, and data on peripheral venous catheter-associated bloodstream infections incidence by number of short-term peripheral venous catheter days are not available. Methods: Prospective, surveillance study on peripheral venous catheter-associated bloodstream infections conducted from 1 September 2013 to 31 May 2019 in 262 intensive care units, members of the International Nosocomial Infection Control</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Consortium, from 78 hospitals in 32 cities of 8 countries in the South-East Asia Region: China, India, Malaysia, Mongolia, Nepal, Philippines, Thailand, and Vietnam. For this research, we applied definition and criteria of the CDC NHSN, methodology of the INICC, and software named INICC Surveillance Online System. Results: We followed 83,295 intensive care unit patients for 369,371 bed-days and 376,492 peripheral venous catheter-days. We identified 999 peripheral venous catheter-associated bloodstream infections, amounting to a rate of 2.65/1000 peripheral venous catheter-days. Mortality in patients with peripheral venous catheter but without peripheral venous catheter-associated bloodstream infections was 4.53% and 12.21% in patients with peripheral venous catheter-associated bloodstream infections. The mean length of stay in patients with peripheral venous catheter but without peripheral venous catheter-associated bloodstream infections was 4.40 days and 7.11 days in patients with peripheral venous catheter and peripheral venous catheter-associated bloodstream infections. The microorganism profile showed 67.1% were Gram-negative bacteria: Escherichia coli (22.9%), Klebsiella spp (10.7%), Pseudomonas aeruginosa (5.3%), Enterobacter spp. (4.5%), and others (23.7%). The predominant Gram-positive bacteria were Staphylococcus aureus (11.4%). Conclusions: Infection prevention programs must be implemented to reduce the incidence of peripheral venous catheter-associated bloodstream infections.</p>				
530.	<p>Rosenthal, V. D., Gupta, D., Rajhans, P., Myatra, S. N., Muralidharan, S., Mehta, Y., Kharbanda, M., Rodrigues, C., Dwivedy, A., Shah, S., Poojary, A., Todi, S. K., Chabukswar, S., Bhattacharyya, M., Ramachandran, B., Ramakrishnan, N., Purkayasta, S. K., Sakle, A. S., Kumar, S., Warriar, A. R., Kavathekar, M. S., Sahu, S., Mubarak, A., Modi, N., Jaggi, N., Gita, N., Mishra, S. B., Sahu, S., Jawadwala, B., Zala, D., Zompa, T., Mathur, P., Nirkhivale, S., Vadi, S., Singh, S., Agarwal, M., Sen, N., Karlekar, A., Punia, D. P., Kumar, S., Gopinath, R., Nair, P. K., Chakravarthy, M., Sandhu, K., Kambam, C., Mohanty, S. K., Varaiya, A., Pandya, N., Subhedar, V. R., Vanajakshi, M. R., Singla, D. and Patel, M.</p> <p>Six-year multicenter study on short-term peripheral venous catheters-related bloodstream infection rates in 204 intensive care units of 57 hospitals in 19 cities of India: International Nosocomial Infection Control Consortium (INICC) findings</p> <p>American Journal of Infection Control; 2020,</p> <p>Address: International Nosocomial Infection Control Consortium (INICC), Buenos Aires, Argentina BM Birla Heart Research Centre, and The Calcutta Medical Research Institute, Calcutta, India Deenanath Mangeshkar Hospital, Pune, India Tata Memorial Hospital, Mumbai, India G Kuppusamy Naidu Memorial Hospital, Coimbatore, India Medanta The Medicity, New Delhi, India</p>	INT	JAN TO JUN	Surgical ICU	<p>SCOPUS H-INDEX:30 IF: 1.397 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Desun Hospital, Kolkata, India Pd Hinduja National Hospital and Medical Research Centre, Mumbai, India Dr L H Hiranandani Hospital, Mumbai, India Kokilaben Dhirubhai Ambani Hospital and Research Institute, Mumbai, India Breach Candy Hospital Trust, Mumbai, India Advanced Medicare Research Institute Dhakuria Unit, Kolkata, India Noble Hospital, Pune, India Advanced Medicare Research Institute Mukundapur Unit, Kolkata, India Kanchi Kamakoti Childs Trust Hospital, Chennai, India Apollo Main Hospital, Chennai, India Peerless Hospital Research Center Ltd, Kolkata, India Bombay Hospital and Medical Research Centre, Mumbai, India Kovai Medical Center and Hospital, Coimbatore, India Aster Medicity, Kochi, India Sahyadri Speciality Hospital, Pune, India Kalinga Hospital, Bhubaneswar, India Kerala Institute of Medical Sciences, Thiruvananthapuram, India Indraprastha Apollo Hospital, New Delhi, India Artemis Health Institute, New Delhi, India Rao Nursing Home, Pune, India IMS and SUM Hospital, Bhubaneswar, India Apollo Hospital, Bhubaneswar, India Saifee Hospital, Mumbai, India Shri Vinoba Bhave Civil Hospital, Silvassa, India Max Super Speciality Hospital, Dehradun, India JPNA Trauma Center Aiims, New Delhi, India Greater Kailash Hospital, Indore, India Global Hospital, Mumbai, India Amrita Institute of Medical Sciences and Research Center, Kochi, India Belle Vue Clinic, Kolkata, India Christian Medical College, Vellore, India Escorts Heart Institute & Research Centre, New Delhi, India Mahatma Gandhi Hospital, Jaipur, India Apollo Children Hospital, Chennai, India Nizam's Institute of Medical Sciences of India, Hyderabad, India Holy Spirit Hospital, Mumbai, India Fortis Hospitals, Bangalore, India Max Super Speciality Hospital Saket, New Delhi, India Columbia Asia Hospital, Patiala, India AMRI Hospitals, Bhubaneswar, India Dr. Balabhai Nanavati Super Speciality Hospital, Mumbai, India Bhailal Amin General Hospital, Vadodara, India Bombay Hospital Indore, Mumbai, India Columbia Asia Referral Hospital Yeshwanthpur, Bangalore, India				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Maharaja Agrasen Hospital, New Delhi, India Sir H N Reliance Foundation Hospital and Research Centre, Mumbai, India</p> <p>Background: Short-term peripheral venous catheters-related bloodstream infections (PVCr-BSIs) rates have not been systematically studied in developing countries, and data on their incidence by number of device-days are not available. Methods: Prospective, surveillance study on PVCr-BSI conducted from September 1, 2013 to May 31, 2019 in 204 intensive care units (ICUs), members of the International Nosocomial Infection Control Consortium (INICC), from 57 hospitals in 19 cities of India. We applied US INICC definition criteria and reported methods using the INICC Surveillance Online System. Results: We followed 7,513 ICU patients for 296,893 bed-days and 295,795 short term peripheral venous catheter (PVC)-days. We identified 863 PVCr-BSIs, amounting to a rate of 2.91/1,000 PVC-days. Mortality in patients with PVC but without PVCr-BSI was 4.14%, and 11.59% in patients with PVCr-BSI. The length of stay in patients with PVC but without PVCr-BSI was 4.13 days, and 5.9 days in patients with PVCr-BSI. The micro-organism profile showed 68% of gram negative bacteria: Escherichia coli (23%), Klebsiella spp (15%), Pseudomonas aeruginosa (5%), and others. The predominant gram-positive bacteria were Staphylococcus aureus (10%). Conclusions: PVCr-BSI rates found in our ICUs were much higher than rates published from industrialized countries. Infection prevention programs must be implemented to reduce the incidence of PVCr-BSIs. © 2020 Association for Professionals in Infection Control and Epidemiology, Inc.</p>				
531.	<p>Roy, G. B., Aparna, I., Alex, K. T. and Sameer, M. Myositis ossificans-a rare tumor of the chest wall Indian J Thorac Cardiovasc Surg; 2020, 36 (6): 657-660 Address: The Department of CTVS, The Christian Medical College, Vellore, Tamil Nadu 632004 India. GRID: grid.11586.3b. ISNI: 0000 0004 1767 8969 The Department of Radiology, The Christian Medical College, Vellore, Tamil Nadu 632004 India. GRID: grid.11586.3b. ISNI: 0000 0004 1767 8969 The Department of Pathology, The Christian Medical College, Vellore, Tamil Nadu 632004 India. GRID: grid.11586.3b. ISNI: 0000 0004 1767 8969 Myositis ossificans (MO) is the abnormal formation of benign heterotopic bone tissue in soft tissues or muscles, mostly in sites of trauma. Though it has been described in most parts of the body, less than a dozen cases involving the chest wall have been reported. It is known to resolve spontaneously and various medical treatments have been suggested to hasten its resolution. Large tumors, suspicion of malignancy, and presence of symptoms are indications for surgical intervention. The differential diagnoses include sarcomas, infections, callous, calcified hematomas, and cysts. We present the clinical, radiological, and pathological images of a post traumatic MO of the chest wall, arising from under the medial third of the clavicle and growing into the deeper surface of the pectoralis major muscle. The patient is doing well eight months after the excision of the same.</p>	NAT	JUL TO DEC	Cardiothoracic vascular Surgery, Radiology, Pathology	PMID: 33100630 PMC:7573018

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
532.	<p>Ruan-Iu, L., Pendergast, L. L., Rasheed, M., Tofail, F., Svensen, E., Maphula, A., Roshan, R., Nahar, B., Shrestha, R., Williams, B., Schaefer, B. A., Scharf, R., Caulfield, L. E., Seidman, J. and Murray-Kolb, L. E. Assessing Early Childhood Fluid Reasoning in Low- and Middle-Income Nations: Validity of the Wechsler Preschool and Primary Scale of Intelligence Across Seven MAL-ED Sites Journal of Psychoeducational Assessment; 2020, 38 (2): 256-262</p> <p>Address: Temple University, Philadelphia, PA, United States Aga Khan University, Karachi, Pakistan International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh University of Bergen, Norway University of Venda, Thohoyandou, South Africa Christian Medical College, Vellore, India Tribhuvan University, Kathmandu, Nepal Pennsylvania State University, University ParkPA, United States University of Virginia, Charlottesville, VA, United States Johns Hopkins University, Baltimore, MD, United States National Institutes of Health, Bethesda, MD, United States</p> <p>An adapted version of the Wechsler Preschool and Primary Scale of Intelligence—Third Edition (WPPSI-III) was administered to assess cognitive functioning among 1,253 5-year-old children from the Malnutrition and Enteric Disease (MAL-ED) study—an international, multisite study investigating multiple aspects of child development. In this study, the factor structure and invariance of the WPPSI-III were examined across seven international research sites located in Bangladesh, Brazil, India, Nepal, Pakistan, South Africa, and Tanzania. Using a multiple indicator multiple cause (MIMIC) modeling approach, the findings supported the validity of a fluid reasoning dimension (comprised of block design, matrix reasoning, and picture completion subscales) across each of the seven sites, although the scores were noninvariant. Accordingly, these scores are recommended for research purposes and understanding relationships between variables but not for mean comparisons or clinical purposes. © The Author(s) 2019.</p>	INT	JAN TO JUN	Psychiatry	<p>SCOPUS H-INDEX:43 IF: 1.404 BIOXBIO (2018/2019)</p>
533.	<p>Rupa, V. and Joy, N. Management of coexistent sinonasal pathology in patients undergoing endoscopic cerebrospinal fluid rhinorrhea repair Braz J Otorhinolaryngol; 2020, Address: Christian Medical College Hospital, Department of ENT, Vellore, India. Electronic Address: rupavedantam@cmcvellore.ac.in. Christian Medical College Hospital, Department of ENT, Vellore, India. INTRODUCTION: Patients who undergo endoscopic cerebrospinal fluid rhinorrhea repair may occasionally present with coexistent sinonasal pathology which may or may not need to be addressed prior to surgical repair. Some patients may develop</p>	INT	JUL TO DEC	ENT	<p>PMID: 33408063</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	new onset nasal morbidity related to endoscopic repair. OBJECTIVE: To study the prevalence and management of additional sinonasal pathology in patients who undergo endoscopic repair of cerebrospinal fluid rhinorrhea METHODS: A retrospective review of patients who underwent endoscopic cerebrospinal fluid leak repair was conducted to note the presence of coexistent sinonasal morbidity preoperatively and in the followup period. RESULTS: Of a total of 153 patients who underwent endoscopic closure of cerebrospinal fluid leak, 97 (63.4%) were female and 56 (36.6%) males. Most patients (90.2%) were aged between 21 and 60 years, with a mean of 40.8 years. Sixty-four patients (41.8%) were found to have coexistent sinonasal morbidity preoperatively, the commonest being symptomatic deviated nasal septum (17.6%), chronic rhinosinusitis without polyps (11.1%) and chronic rhinosinusitis with polyps (3.3%). Rare instances of septal hemangioma (0.7%) and inverting papilloma (0.7%) were also seen. Postoperatively, there was cessation of cerebrospinal fluid rhinorrhea in 96.7% which rose to 100% after revision surgery in those with recurrence. Resolution of coexistent sinonasal pathology occurred in all patients with followup ranging from 10 to 192 months. New onset sinonasal morbidity which developed postoperatively included synechiae between middle turbinate and lateral nasal wall (5.9%) and sinonasal polyposis (1.3%). CONCLUSION: Patients who undergo endoscopic cerebrospinal fluid leak repair may have coexistent sinonasal pathology which needs to be addressed prior to or along with repair of the dural defect. New onset sinonasal morbidity, which may arise in a few patients postoperatively, may require additional treatment. A protocol for the management of coexistent sinonasal conditions ensures a successful outcome.				
534.	Russell, P. S. S. The clinical utility of a multivariate genetic panel for identifying those at risk of developing Opioid Use Disorder while on prescription opioids Scandinavian Journal of Pain; 2020, 20 (2): 419-420 Address: Department of Psychiatry, Child and Adolescent Psychiatry Unit, Christian Medical College, Vellore, Tamil Nadu, India	INT	JAN TO JUN	Psychiatry, Child and Adolescent Psychiatry	SCOPUS H-INDEX: 20 IF: 0.830 RG (2018/2019)
535.	Russell, P. S. S., Chikkala, S. M., Earnest, R., Viswanathan, S. A., Russell, S. and Mammen, P. M. Diagnostic accuracy and clinical utility of non-English versions of Edinburgh Post-Natal Depression Scale for screening post-natal depression in India: A meta-analysis World J Psychiatry; 2020, 10 (4): 71-80 Address: [Russell, Paul Swamidhas Sudhakar; Chikkala, Swetha Madhuri; Earnest, Richa; Viswanathan, Shonima Aynipully; Russell, Sushila; Mammen, Priya Mary] Christian Med Coll & Hosp , Dept Psychiat, Child & Adolescent Psychiat Unit, Vellore 632002, Tamil Nadu, India. Russell, PSS (reprint author), Christian Med Coll & Hosp , Dept Psychiat, Child &	INT	JAN TO JUN	Psychiatry, Child and Adolescent Psychiatry	PMID: 32399400 PMC ID: PMC7203085 WOS: 000536162700004 H-INDEX: NA IF: 3.545 Journal Citation Reports (2020)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Adolescent Psychiat Unit, Vellore 632002, Tamil Nadu, India. russell@cmcvellore.ac.in</p> <p>BACKGROUND: The prevalence of post-natal depression (PND) is high in India, as it is in many other low to middle income countries. There is an urgent need to identify PND and treat the mother as early as possible. Among the many paper and pencil tests available to identify PND, the Edinburgh Postnatal Depression Scale (EPDS) is a widely used and validated measure in India. However, the summary diagnostic accuracy and clinical utility data are not available for this measure. AIM: To establish summary data for the global diagnostic accuracy parameter as well as the clinical utility of the non-English versions of the EPDS in India. METHODS: Two researchers independently searched the PubMed, EMBASE, MEDKNOW and IndMED databases for published papers, governmental publications, conference proceedings and grey literature from 2000-2018. Seven studies that evaluated the diagnostic accuracy of EPDS in five Indian languages against DSM/ICD were included in the final analysis. Two other investigators extracted the Participants' details, Index measures, Comparative reference measures, and Outcomes of diagnostic accuracy data, and appraised the study quality using QUADS-2. Deek's plots were used to evaluate publication bias. We used the area under the curve of the hierarchical summary area under the receiver operating characteristic curve, with the random effect model, to summarize the global diagnostic accuracy of EPDS. Using the 2 × 2 table, we calculated positive and negative likelihood ratios. From the likelihood ratios, the Fagan's nomogram was built for evaluating clinical utility using the Bayesian approach. We calculated the 95% confidence interval (95%CI) whenever indicated. STATA (version 15) with MIDAS and METANDI modules were used. RESULTS: There was no publication bias. The area under the curve for EPDS was 0.97 (95%CI: 0.95-0.98). The pre-test probability for the nomogram was 22%. For a positive likelihood ratio of 9, the positive post-test probability was 72% (95%CI: 68%, 76%) and for a negative LR of 0.08, the negative post-test probability was 2% (95%CI: 1%, 3%). CONCLUSION: In this meta-analysis, we established the summary global diagnostic parameter and clinical utility of the non-English versions of the EPDS in India. This work demonstrates that these non-English versions are accurate in their diagnosis of PND and can help clinicians in their diagnostic reasoning.</p>				
536.	<p>Ruth, M. S., Sridharan, N., Rai, E. and Joselyn, A. S. A prospective observational study to evaluate the magnitude of temperature changes in children undergoing elective MRI under general anesthesia Saudi J Anaesth; 2020, 14 (2): 200-205</p> <p>Address: Department of Anaesthesia, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Department of Biostatistics, Christian Medical College and Hospital, Vellore, Tamil Nadu, India.</p>	INT	JAN TO JUN	Anaesthesia, Biostatistics	<p>PMID:32317875 PMC ID: PMC7164450 SCOPUS H-INDEX:22 IF: 1.605 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>CONTEXT: Induction of general anesthesia and mandatory low-ambient temperature in the magnetic resonance imaging (MRI) suite renders the pediatric patient prone to fall in core temperature. Previously done studies have shown mixed results with core temperature showing both rise and fall. AIMS: The aim of this study is to evaluate which effect, hypothermia or hyperthermia, predominates in children anesthetized for MRI. Is the change in temperature the same across age groups and for different MRI scanners?. SETTINGS AND DESIGN: Prospective, observational study in a tertiary care teaching hospital. SUBJECTS AND METHODS: Two hundred and fifty children of age between 1 month and 16 years scheduled for MRI under propofol-based total intravenous anesthesia (TIVA) were recruited. A baseline core temperature (pre-scan) was recorded with the pediatric nasopharyngeal temperature probe after induction of anesthesia and also after the scan in the recovery room. RESULTS: The study shows that there is a significant fall in temperature of 1.022°C (CI = 0.964, 1.081) following MRI (P < 0.001) but the difference across different age groups and type of MRI scanner used are not significant. There is a significant correlation between duration in the MRI room and a decrease in temperature (P value = 0.003). Using simple linear regression analysis, it is found that if there is a 1-min increase in the duration of MRI, there is a decrease of 0.006°C in temperature. CONCLUSION: Vigilant temperature preservation strategies have to be maintained during the time the anesthetized child is present in the MRI suite. MRI compatible active warming devices are warranted especially in high turnover centers.</p>				
537.	<p>Sadanshiv, M., Jeyaseelan, L., Kirupakaran, H., Sonwani, V. and Sudarsanam, T. D. Feasibility of computer-generated telephonic message-based follow-up system among healthcare workers with diabetes: a randomized controlled trial BMJ Open Diabetes Res Care; 2020, 8 (1): Address: General Medicine, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India msadanshiv@gmail.com. Biostatistics, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. Staff Student Health Service, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. Padhar Hospital, Betul, Madhya Pradesh, India. Internal Medicine, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. INTRODUCTION: To assess the feasibility of computer-generated educational messaging system in healthcare workers of a tertiary care hospital. The secondary objectives were glycemic control, patient satisfaction and adherence to lifestyle modifications. RESEARCH DESIGN AND METHODS: Single-center parallel-group open-labeled randomized controlled trial with computer generated block randomization. SETTING: Healthcare workers with diabetes working in Christian Medical College Vellore, Tamil Nadu. PARTICIPANTS: 431 assessed, 341 met the</p>	INT	JUL TO DEC	General Medicine, Biostatistics, Staff Student Health Service, Internal Medicine	PMID: 32661193 PMC:7359061 WOS:000573837600011

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>selection criteria, 320 participants were randomized and 161 were taken into intervention arm and 159 in the control arm. INTERVENTION: Computer-generated short message service (SMS) based on transtheoretical model of behavioral change, 2 messages per week for 3 months, along with standard of care diabetic care. Messages had educational material regarding healthy eating habits and exercise and these messages were sent twice weekly. The messages were scheduled via an automatic calendar in a way that each subject in the intervention arm received 15 educational messages per month. Control group received only standard of care diabetic care which included dietary advice, exercise regimen and diabetic medications under supervision of their physician every 3 months. FOLLOW-UP: 6 months. RESULTS: 95.65% of people in the intervention arm (n=154) received regular messages, out of which 93.17% read the messages regularly. 80.12% acted on the messages. 93.17% felt more satisfied with their healthcare. While both groups showed improvement in body mass index (BMI) and hemoglobin A1c (HbA1c), the difference was greater in the intervention with regard to both decrease in BMI (-0.6, p<0.001) and HBA1c (-0.48, p<0.001). CONCLUSIONS: SMS-based education system is feasible in improving healthcare among healthcare workers with diabetes. It improves patient satisfaction, adherence and improves healthcare among individuals with diabetes by decreasing their BMI and decreasing HbA1c.</p>				
538.	<p>Saha, A., Moray, K. V., Devadason, D., Samuel, B., Daniel, S. E., Lalthazuali, Peter, J. V., Jamshed, J., Harigovind, M. R., Manne, M. R., Evangeline, P. A., Alexander, R. S., Issaac, R., Kumar, S. J., Roy, S., Chaudhuri, S. and Mohan, V. R.</p> <p>Water quality, sanitation, and hygiene among the tribal community residing in Jawadhi hills, Tamilnadu: An observational study from Southern India J Family Med Prim Care; 2020, 9 (11): 5711-5718</p> <p>Address: Department of Community Health, Christian Medical College, Vellore, India. The Wellcome Trust Research Laboratories, Christian Medical College, Vellore, India.</p> <p>OBJECTIVES: To assess the water, sanitation, and hygiene (WASH) practice among the tribal population of Tamil Nadu, India and to determine the physiochemical and bacteriological quality of drinking water at the principal source and at the households along with the household-level determinants of WASH practices. METHODS: A door-to-door survey was conducted in 150 households, distributed across six villages of Jawadhi hills, a tribal area in the state of Tamil Nadu, India. Water samples were collected from the principal sources and a subset of households for assessing water quality. A composite scoring was formulated to determine the overall WASH practices. RESULTS: Overall, a poor WASH score (≤ 4) was found in 103 (68.7%; 95% CI: 60.7, 75.6) households. The majority (96.7%) of the household water samples showed the presence of fecal coliforms. Poor WASH score was uniformly distributed across the villages. Low per capita income (≤ 1000 INR) was strongly associated with the poor WASH score (Adjusted OR 2.4; 95% CI:</p>	NAT	JUL TO DEC	Community Health, Wellcome Trust Research	PMID:33532419 PMC ID:7842438

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	1.04, 5.7). The per capita income had a strong negative association with the high fecal coliform count (Adjusted OR 5.07; 95% CI: 1.08, 23.74). CONCLUSIONS: We conclude that WASH-related practices among the tribal population of Tamil Nadu is not acceptable. The lack of administrative function and poor economic conditions are the likely causes attributed to the poor WASH conditions and drinking water quality. Urgent action from the stakeholders is the need of the hour to improve the water quality and living standards of such marginalized populations.				
539.	<p>Said, E. A., Al-Reesi, I., Al-Shizawi, N., Jaju, S., Al-Balushi, M. S., Koh, C. Y., Al-Jabri, A. A. and Jeyaseelan, L.</p> <p>Defining IL-6 levels in healthy individuals: A meta-analysis J Med Virol; 2020, Address: Department of Microbiology and Immunology, College of Medicine and Health Sciences, Sultan Qaboos University, Al Khoudh, Sultanate of Oman. Department of Microbiology, Suhar Hospital, Sohar, Sultanate of Oman. Department of Family Medicine and Public Health, College of Medicine and Health Sciences Sultanate of Oman, Alkoudh, Sultanate of Oman. Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND: Interleukin-6 (IL-6) is produced by and impacts different cell types in human. IL-6 is associated with different diseases and viral infections, including COVID-19. To our knowledge, no normal values were reported for IL-6 in the blood of healthy individuals. We have reviewed and performed a meta-analysis on a total of 140 studies, including 12,421 values for IL-6 in the blood of healthy adult donors. Among these studies, 83 did not report a mean value and the standard deviation. Therefore, for the statistical analysis, we used the values reported in 57 studies, which included 3166 values for IL-6. RESULTS: The reported values for IL-6 in the blood of healthy donors varied between 0 and 43.5 pg/ml. The pooled estimate of IL-6 was 5.186 pg/ml (95% confidence interval [CI]: 4.631, 5.740). As the age increased by 1 year, IL-6 values increased by 0.05 pg/ml (95% CI: 0.02, 0.09; p < .01). Though the heterogeneity, as determined by I(2) statistics, was high in our study, the differences in IL-6 values are still at the level of a few pg/ml, which might be related to the differences in the conditions that influence IL-6 production in the healthy population. CONCLUSIONS: This is the first meta-analysis reporting the levels of IL-6 in the blood of healthy donors based on a large number of studies and donors. Therefore the 95% CI values determined in our study could well serve as a reference range for quick decision-making in clinical interventions, particularly those aiming to inhibit IL-6, especially urgent interventions, for example, COVID-19.</p>	INT	JUL TO DEC	Microbiology and Immunology, Biostatistics	PMID: 33155686 WOS:000591272600001
540.	<p>Salminen, T., Mehdi, F., Rohila, D., Kumar, M., Talha, S. M., Prakash, J. A. J., Khanna, N., Pettersson, K. and Batra, G.</p> <p>Ultrasensitive and Robust Point-of-Care Immunoassay for the Detection of Plasmodium falciparum Malaria Analytical Chemistry; 2020, 92 (24): 15766-15772</p>	INT	JUL TO DEC	Clinical Microbiology	WOS:000600095600013

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Address: [Salminen, Teppo; Talha, Sheikh M.; Pettersson, Kim] Univ Turku, Dept Biotechnol, Turku 20520, Finland. [Mehdi, Farha; Rohila, Deepak; Kumar, Manjit; Batra, Gaurav] NCR Biotech Sci Cluster, Translat Hlth Sci & Technol Inst, Faridabad 121001, Haryana, India. [Prakash, John Antony Jude] Christian Med Coll & Hosp, Dept Clin Microbiol, Vellore 632004, Tamil Nadu, India. [Khanna, Navin] Int Ctr Genet Engn & Biotechnol, New Delhi 110067, India.</p> <p>Batra, G (corresponding author), NCR Biotech Sci Cluster, Translat Hlth Sci & Technol Inst, Faridabad 121001, Haryana, India. gaurav.batra@thsti.res.in</p> <p>Plasmodium falciparum malaria is widespread in the tropical and subtropical regions of the world. There is ongoing effort to eliminate malaria from endemic regions, and sensitive point-of-care (POC) diagnostic tests are required to support this effort. However, current POC tests are not sufficiently sensitive to detect P. falciparum in asymptomatic individuals. After extensive optimization, we have developed a highly sensitive and robust POC test for the detection of P. falciparum infection. The test is based on upconverting nanophosphor-based lateral flow (UCNP-LF) immunoassay. The developed UCNP-LF test was validated using whole blood reference panels containing samples at different parasite densities covering eight strains of P. falciparum from different geographical areas. The limit of detection was compared to a WHO-prequalified rapid diagnostic test (RDT). The UCNP-LF achieved a detection limit of 0.2-2 parasites/mu L, depending on the strain, which is 50- to 250-fold improvement in analytical sensitivity over the conventional RDTs. The developed UCNP-LF is highly stable even at 40 degrees C for at least 5 months. The extensively optimized UCNP-LF assay is as simple as the conventional malaria RDTs and requires 5 mu L of whole blood as sample. Results can be read after 20 min from sample addition, with a simple photoluminescence reader. In the absence of a reader device at the testing site, the strips after running the test can be transported and read at a central location with access to a reader. We have found that the test and control line signals are stable for at least 10 months after running the test. The UCNP-LF has potential for diagnostic testing of both symptomatic and asymptomatic individuals.</p>				
541.	<p>Sam, A. S., Ninan, M. M., Ranjani, R., Devanga Raghupathi, N. K., Balaji, V. and Michael, J. S.</p> <p>Nontuberculous mycobacteria - clinical and laboratory diagnosis: experiences from a TB endemic country</p> <p>Future Sci OA; 2020, 6 (9): FSO612</p> <p>Address: Department of Clinical Microbiology, Christian Medical College, Vellore-632004, India.</p> <p>AIM: To evaluate the performance of VITEK(®)MS with DNA sequencing for laboratory diagnosis of non-tuberculous mycobacteria (NTM) species in a resource-limited setting. METHODS: 16SrRNA sequencing and MALDI-TOF mass spectrometry (VITEK(®)MS) was performed at a tertiary-care hospital in India. MALDI-TOF results were confirmed by 16S rRNA sequencing. In addition,</p>	INT	JUL TO DEC	Clinical Microbiology	PMID: 33235807 PMC:7668123

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	sequencing of the internal transcribed spacer region was performed on slowly growing NTM. RESULTS: Commonest species isolated were M. abscessus, M. intracellulare, M. avium, M. fortuitum and M. simiae. 16S rRNA sequencing and MALDI-TOF results had agreement of 94.5% for rapidly growing and 77.5% for slowly growing NTM. CONCLUSION: There is good correlation between VITEK(®)MS and sequencing for rapidly growing NTM. For slowly growing species, sequencing would be required in a third isolates.				
542.	<p>Sam, C. J., Kurian, J. J., Kishore, R., Arunachalam, P. and Sen, S. Management and outcome in dehiscd exstrophy with a simplified bladder re-closure and further reconstruction J Pediatr Urol; 2020, 16 (6): Address: [Sam, Cenita James; Arunachalam, Pavai; Sen, Sudipta] PSG Inst Med Sci & Res, Dept Paediat Surg, Coimbatore, Tamil Nadu, India. [Kurian, Jujju Jacob; Kishore, Ravi] Christian Med Coll & Hosp, Dept Paediat Surg, Vellore 632004, Tamil Nadu, India.</p> <p>Kurian, JJ (corresponding author), Christian Med Coll & Hosp, Dept Paediat Surg, Vellore 632004, Tamil Nadu, India. cenitasivamani@gmail.com; jujujacobkurian@gmail.com; ravikishore96@gmail.com; pavaiganesan@gmail.com</p> <p>Introduction The traditionally accepted method of bladder re closure in dehiscd exstrophy involves osteotomy assisted pubic bone approximation (PBA). Continent voluntary voiding is achieved in a small proportion of children sometimes after many operative procedures. We propose a simple yet reliable method of repair of the dehiscd bladder using Rectus abdominis muscle flap (RAM) instead of PBA to bridge the inter-pubic gap, followed by concomitant or subsequent bladder augmentation (BA). Aim The aim of this study is to assess the outcome of dehiscd exstrophy, using a RAM flap assisted redo closure (without PBA) with concomitant or subsequent further reconstruction. Materials and methods This is a retrospective analysis of children who presented with dehiscd exstrophy after repair in other institutions and who have undergone redo repair using RAM flap in two tertiary care centers from 2001 to 2019. The outcome of the redo closure and subsequent or concomitant further reconstruction as regards dryness, stability of the upper tracts and resolution of vesico ureteric reflux (VUR) was studied. Results Fifty five children (34 boys) underwent redo exstrophy repair for dehiscd exstrophy using the RAM flap. Epispadias repair was performed concomitantly in 31 boys. In 26 children (group1) of mean age 12 months further surgery was deferred while in 29 children (group 2) of mean age 69 months underwent concomitant BA. Nine group 1 children underwent BA subsequently. Ureteric reimplantation was done at the time of BA in 54 ureters, 40 into the bladder plate and rest into the bowel segment of BA. 22 ureters were not reimplanted. Bladder neck surgery including 18 bladder neck closure and Mitrofanoff port for Clean Intermittent catheterization (CIC) were done along with BA. The RAM assisted bladder closure was event free and none needed redo operation. 35/38 augmented children are dry on Mitrofanoff CIC and one unaugmented boy voids normally. The</p>	INT	JUL TO DEC	Paediatric Surgery	WOS:000600600300027

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	upper tracts remain stable on ultrasound and VUR has resolved in 67/76 ureters. At current follow up, after a mean period of 53 months eGFR was normal in all except 3 who had initially presented with severe hydro uretero nephrosis. Conclusion We present a simple and reliable method of repair of dehiscence of exstrophy using RAM flap with the feasibility of concomitant BA. Dryness was achieved with stable upper tracts in 36/39 children, 27 of them with a single reconstructive attempt. [GRAPHICS]				
543.	Samarasam, I. Acute respiratory distress following a minimally invasive oesophagectomy ANZ J Surg; 2020, Address: Upper GI Surgery Unit, Division of Surgery, Christian Medical College and Hospital, Vellore, India.	INT	JUL TO DEC	Upper GI Surgery Unit, Division of Surgery	PMID: 32918859
544.	Sambasivan, M., Mathai, K. V. and Chandu, J. Surgical Experience with Eighty Cases of Acoustic Neurinoma Neurol India; 2020, 68 (2): 257-261 Address: Department of Neurology and Neurosurgery, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Clinical features and results of surgical treatment of 80 cases of acoustic neurinoma are described. A one-stage total primary excision, when feasible, offers the best chance of cure. This has not been possible in some because of the large size of the tumour, extension into tentorial hiatus, extreme vascularity and adherence to the brain stem. In such cases tumour removal had to be carried out in two or three stages resulting in a higher mortality and morbidity. No deliberate attempt at preservation of the facial nerve has been made because of the large size of these tumours. A pre-operative ventriculo-atrial shunt improved the results of surgery. © 2020 Neurology India, Neurological Society of India IF: Published by Wolters Kluwer – Medknow.	NAT	JAN TO JUN	Neurology and Neurosurgery	PMID:32414998 SCOPUS H-INDEX:45 IF: 2.708 BIOXBIO (2018/2019)
545.	Samprathi, A., Chacko, B., D'sa S, R., Rebekah, G., Vignesh Kumar, C., Sadiq, M., Victor, P., Prasad, J., Jayakaran, J. A. J. and Peter, J. V. Adrenaline is effective in reversing the inadequate heart rate response in atropine treated organophosphorus and carbamate poisoning Clin Toxicol (Phila); 2020, 1-7 Address: Medical Intensive Care Unit, Christian Medical College, Vellore, India. Department of Biostatistics, Christian Medical College, Vellore, India. Department of Medicine, Christian Medical College, Vellore, India. Speciality Registrar, Edinburgh Center for Endocrinology and Diabetes, NHS, Edinburgh, UK. BACKGROUND: In acute organophosphorus (OP) or carbamate poisoning, some patients require high dose atropine to counteract the effects on heart rate (HR) and blood pressure (BP). This study describes the factors associated with high dose atropine therapy and the use of adrenaline to reverse the inadequate HR response to atropine. METHODS: Consecutive patients admitted to the intensive care unit	INT	JUL TO DEC	Medical Intensive Care Unit, Biostatistics, Medicine	PMID: 33135482

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	(ICU) were prospectively recruited. Demographic data, treatment and outcomes of patients who failed to achieve target HR (100/min) or systolic BP >90 mm Hg with either a cumulative atropine dose of 100-mg within 6-h following admission or an infusion of 30 mg/h for at least 3-h were compared with patients who achieved the targets. Factors associated with high dose atropine therapy were explored using logistic regression analysis and expressed as odds ratio (OR) with 95% confidence intervals (CIs). RESULTS: Of the 181 patients admitted with OP or carbamate poisoning, 155 patients fulfilled inclusion criteria. The mean (SD) age was 35.7 (15.8) years; admission APACHE-II score was 14.6 (7.5). Heart rate and/or BP target was not achieved in 13.6%. In these patients, target HR was achieved after adding adrenaline infusion at 2-4 µg/min. Ventilation duration (11.6 ± 6.3 vs. 8.4 ± 6.9 days, p = 0.05) and ICU stay (12.3 ± 5.8 vs. 8.9 ± 5.8 days, p = 0.01) were longer in patients requiring high dose atropine when compared with others. On multivariate logistic regression analysis, shorter time to presentation to hospital (p = 0.04) was associated with need for high dose atropine. Overall mortality was 9% and similar in both groups (p = 0.41). CONCLUSIONS: High dose atropine therapy is required in a subset of patients with OP and carbamate poisoning and was associated with longer ventilation duration and ICU stay. Adrenaline infusion improved hemodynamics in these patients.				
546.	Samson, D., Rupa, V., Veeraraghavan, B., Varghese, R., Isaac, R. and L, J. Follow up of a birth cohort to identify prevalence and risk factors for otitis media among Indian children in the eighth year of life Int J Pediatr Otorhinolaryngol; 2020, 137 110201 Address: Department of ENT, Christian Medical College, Vellore, India. Department of ENT, Christian Medical College, Vellore, India. Electronic Address: rupavedantam@cmcvellore.ac.in. Microbiology, Christian Medical College, Vellore, India. RUHSA, Christian Medical College, Vellore, India. Biostatistics, Christian Medical College, Vellore, India. BACKGROUND: Otitis media, a disease highly prevalent among children worldwide, manifests clinically in both acute and chronic forms. The manner and time at which chronicity develops among Indian children is unknown. AIM: To study the prevalence, manifestations and risk factors for otitis media in a birth cohort aged 8 years. METHODS: A birth cohort of 107 babies was followed up at 8 years of age and ENT evaluation with nasopharyngeal swabbing for detecting Streptococcus pneumoniae and Hemophilus influenzae was performed. RESULTS: The overall prevalence of otitis media was 14%, almost half the prevalence in the first 2 years of life. Eight children (7.5%) with congested, bulging eardrums and no systemic symptoms had asymptomatic acute otitis media. Another five (4.7%) children had otitis media with effusion and 2 (1.9%) had chronic suppurative otitis media. Although 10/15 (66.7%) children with otitis media had positive swabs at 8 years age, only 2 were pneumococcal vaccine (PCV-13) serotypes. Risk factor analysis showed that passive smoking was the only significant parameter associated with	INT	JUL TO DEC	ENT, Microbiology, RUHSA, Biostatistics	PMID: 32658800

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	otitis media (p = 0.029). Nasopharyngeal swabbing showed that 51/105 (48.6%) children had positive swabs for S. pneumoniae and 5/105 (4.8%) for S.pneumoniae with non-type b H. influenzae. The ten most commonly encountered pneumococcal serotypes were 6A,4,8,16F,33B,35A,35B, 18C, 19F and 23B which together comprised 29 of the 56 (51.8%) isolates. PCV-13 serotypes formed 19/56 (33.9%) to 21/56 (37.5%) of all pneumococcal isolates. Of 6 children who had received PCV-13, 4 tested positive for S. pneumoniae at 8 years of age too. However, none were vaccine serotypes. Four of those with otitis media who had positive swabs had received no immunisation at all and 3 of them had vaccine serotypes, viz. 4, 6A and 18C respectively. CONCLUSION: Indian children continue to have a high prevalence of otitis media at 8 years age. More than 1/3 of nasopharyngeal isolates at this age are vaccine serotypes. Passive smoking is an important risk factor for childhood otitis media and may contribute to the development of chronicity of the disease.				
547.	Samuel, H. T., Varghese, L., Kuriën, R. and Thomas, M. Human papilloma virus induced oropharyngeal inverted papilloma as a precursor to laryngeal papillomatosis in A 1 year old child Int J Pediatr Otorhinolaryngol; 2020, 138 110335 Address: Department of Otorhinolaryngology, Christian Medical College, Vellore, India. Electronic Address: habiethomas@hotmail.com. Department of Otorhinolaryngology, Christian Medical College, Vellore, India. Electronic Address: laleevarghese@cmcvellore.ac.in. Department of Otorhinolaryngology, Christian Medical College, Vellore, India. Electronic Address: regikuriën@cmcvellore.ac.in. Department of Pathology, Christian Medical College, Vellore, India. Electronic Address: thomasmeera2@gmail.com. Inverted papillomas are rare tumors in the pediatric population and have not been reported in children less than two years. These tumors may produce respiratory distress in patients, particularly if they ectopically occur in the airway. Human papilloma virus is one of the known etiologies for many head and neck neoplasms including inverted papillomas and squamous papillomas. We report a child who was surgically treated at fifteen months of age for inverted papilloma of the pharynx who subsequently developed squamous papilloma of the larynx which persisted as a recurrent respiratory papillomatosis. This is the first such reported case to our knowledge.	INT	JUL TO DEC	Otorhinolaryngology, Pathology	PMID: 32896755
548.	Samuel, R., S, A. and Jacob, K. S. A Qualitative Study Exploring the Lived Experience of Unemployment Among People with Severe Mental Illness Indian J Psychol Med; 2020, 42 (5): 435-444 Address: Dept. of Psychiatry, Christian Medical College, Vellore, Tamil Nadu, India. BACKGROUND: Severe mental illnesses lead to deterioration in the life skills of the patient, resulting in socio-occupational dysfunction and low rates of employment. The purpose of this study was to explore attitudes, knowledge, and barriers to	NAT	JUL TO DEC	Psychiatry	PMID: 33414590 PMC:7750852

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	employment as experienced by patients and their caregivers in India. METHOD: Patients with schizophrenia or bipolar affective disorder, aged between 18 and 60 and undergoing inpatient treatment and their caregivers, were approached for written informed consent and recruited for focus group discussions. A total of eight focus groups were conducted until saturation of themes was seen to have been achieved. The data were transcribed, coded, synthesized, and organized into major findings and implications for practice. RESULTS: Role expectations based on gender were seen to influence the decision to work. The possible recurrence of illness due to excess stress and unsupportive working environments was cited as the most common problem that could arise related to employment. Stigma and faulty attributions related to the illness were the most cited barriers to employment. Most participants felt that psychosocial rehabilitation and family and community support were essential for facilitating work. Most participants did not consider mental illness as a disability and were unaware of government schemes for the mentally ill. CONCLUSION: Considering gender-based role expectations, avenues for self/family employment and improving the awareness of benefits for mental illness both among consumers and health care professionals are essential to enhance economic productivity in people with severe mental illness.				
549.	Sanjeevi, R., John, R. A., Kurien, R. T., Dutta, A. K., Simon, E. G., David, D., Joseph, A. J. and Chowdhury, S. D. Acoustic radiation force impulse imaging of pancreas in patients with early onset idiopathic recurrent acute pancreatitis Eur J Gastroenterol Hepatol; 2020, 32 (8): 950-954 Address: Departments of Gastroenterology. Radiology, Christian Medical College, Vellore , Tamil Nadu, India. BACKGROUND AND AIMS: Patients with recurrent acute pancreatitis (RAP) may progress to chronic pancreatitis (CP). A critical step in this progression is the development of fibrosis. Elastography has been used to assess degree of fibrosis by measurement of shear wave velocity (SWV). The aim of this study was to measure the stiffness of pancreas as a surrogate for pancreatic fibrosis in patients with RAP and compare it with a group of individuals without any history of pancreatic disorders. MATERIAL AND METHODS: Using acoustic radiation force impulse (ARFI) imaging SWV was calculated in 31 patients with idiopathic RAP having disease onset ≤ 30 years. A control group of 31 individuals with no history pancreatic disorder and no features of CP on endosonography was selected for comparison. ARFI imaging was done by a single radiologist who was blinded to the cases and controls RESULTS: Mean age of patients with RAP was 24.8 (SD 9.86) years, disease duration was 3.45 (interquartile range 1-5) years, mean number of episodes 4.9 (SD 2.72). There was a significant difference in SWV between patients (1.27 ± 0.50 m/s) and controls (1.00 ± 0.17 m/s) ($P = 0.001$). There was a positive correlation between SWV and number of pain episodes ($P = 0.026$) and negative	INT	JAN TO JUN	Gastroenterology, Radiology	PMID:32282546 H-INDEX:100 IF: 2.198 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	correlation with BMI (P = 0.002). CONCLUSION: SWV was high in patients with RAP indicating a stiff pancreas. The stiffness increases with the number of episodes of pancreatitis.				
550.	Santhanam, S. NICU Protocols of JIPMER Indian Journal of Pediatrics; 1 Address: [Santhanam, Sridhar] Christian Med Coll & Hosp , Dept Neonatol, Vellore 632004, Tamil Nadu, India. Santhanam, S (reprint author), Christian Med Coll & Hosp , Dept Neonatol, Vellore 632004, Tamil Nadu, India. santhanamsridhar@gmail.com	NAT	JAN TO JUN	Neonatology	WOS:000540391600001 H-INDEX:46 IF: 1.136 BIOXBIO (2018/2019)
551.	Sarkar, A., Datta, D., Datta, S. K. and John, T. J. Acute encephalopathy in children in Muzaffarpur, India: a review of aetiopathogenesis Transactions of the Royal Society of Tropical Medicine and Hygiene; 2020, 114 (9): 704-711 Address: [Sarkar, Abhirup; Datta, Sudip Kumar] All India Inst Med Sci, Dept Lab Med, New Delhi 110029, IN, India. [Datta, Debatri] Med Coll & Hosp, Dept Dermatol Venereol & Leprosy, Kolkata 700073, India. [John, T. Jacob] Christian Med Coll & Hosp, Vellore 632004, Tamil Nadu, India. Sarkar, A (corresponding author), All India Inst Med Sci, Dept Lab Med, New Delhi 110029, IN, India. abhirupsa@gmail.com The acute encephalopathy occurring in children in Muzaffarpur, India, also recognised in other litchi-cultivating areas of India, Bangladesh, Vietnam and China, had previously been linked to litchi consumption. Recently, it has been identified as hypoglycaemic encephalopathy of an unusual aetiology with three key factors: undernutrition, prolonged fasting and litchi consumption. A second set of investigators has independently reconfirmed the diagnosis and the three-factor aetiology. Skipping the evening meal with an intake of large amounts of Litchi in undernourished children is causative. Early-morning hypoglycaemia with an inadequate glycogen store leads to initiation of gluconeogenesis and fatty acid beta-oxidation, but methylene cyclopropyl alanine and glycine present in the litchi aril block the fatty acid beta-oxidation cycle. The outcomes are uncorrected hypoglycaemia and encephalopathy due to the entry of metabolic intermediates that cross the blood-brain barrier and affect neuronal function. Suggested measures include early 10% dextrose infusion. Awareness about the disease is of prime importance. The diagnosis and aetiopathogenesis are still under question from a part of the scientific community. This review was undertaken to present a comprehensive view of hypoglycaemic encephalopathy and to remove some of the Lingering doubts.	INT	JUL TO DEC	Clinical Virology	WOS:000593289900013
552.	Sarkar, S. and Chacko, A. G.	NAT	JUL TO DEC		PMID:32611892

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Surgery for Acromegaly Neurol India; 2020, 68 (Supplement): S44-S51</p> <p>Address: Section of Neurosurgery, Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Growth hormone (GH) hypersecretion from a pituitary adenoma results in acromegaly, an endocrinological disorder with multiple systemic manifestations that presents several unique challenges in terms of perioperative management and long term outcomes. Current guidelines provide stringent criteria for determining biochemical remission, necessitating an aggressive approach to management. Despite the development of several non-surgical therapies, transsphenoidal surgery, the endoscopic approach in particular, remains the primary line of treatment for rapid normalization of GH and Insulin-like growth factor with a low incidence of perioperative morbidity. Tumor size and invasiveness are important factors predicting surgical outcomes with better rates of postoperative remission seen in smaller and non-invasive tumors. Postoperative remission rates reported in literature with the 2020 consensus criteria vary from 30 to 85% probably reflecting varying prevalence rates of invasive tumors. Thus, a significant proportion of patients fail to achieve remission after surgery for whom treatment options for residual disease must be carefully considered. This review article discusses the surgical management of acromegaly and provides a summary of contemporary outcomes and current treatment controversies.</p>				
553.	<p>Sarkar, S., Chacko, S. R., Korula, S., Simon, A., Mathai, S., Chacko, G. and Chacko, A. G. Long-term outcomes following maximal safe resection in a contemporary series of childhood craniopharyngiomas Acta Neurochir (Wien); 2020, Address: Department of Neurological Sciences, Christian Medical College, Vellore, 632004, India. Department of Internal Medicine, Einstein Medical Center, Philadelphia, PA, USA. Department of Pediatric Endocrinology, Christian Medical College, Vellore, India. Department of Pathology, Christian Medical College, Vellore, India. Department of Neurological Sciences, Christian Medical College, Vellore, 632004, India. arichacko@cmcvellore.ac.in. BACKGROUND: The optimal management of pediatric craniopharyngiomas remains controversial. This study aimed to characterize long-term outcomes in a contemporary cohort of children undergoing surgery for craniopharyngiomas. METHODS: This was a retrospective review of 37 consecutive children who underwent surgery for craniopharyngioma with a median follow-up duration of 79 months (range 5-127 months). Patients were stratified by extent of resection (EOR) and need for adjuvant radiation therapy (RT). Imaging studies were reviewed to grade extent of hypothalamic involvement. Data on functional outcomes, pituitary function, and obesity were analyzed. RESULTS: Gross total resection was achieved in 16 patients (43.2%), near total resection in six patients (16.2%), and subtotal</p>	INT	JUL TO DEC	Neurological Sciences, Pediatric Endocrinology, Pathology	PMID: 33078364

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	resection (STR) in 15 patients (40.5%). The recurrence-free survival rate was 81.1% and 70.3% at 5- and 10-year follow-up, respectively. Survival analysis showed superior disease control in patients undergoing STR + RT (p = 0.008). Functional outcomes were independent of EOR, postoperative RT or recurrence. Diabetes insipidus was present in 75% and 44.4% of patients required >2 hormone replacements at last follow-up. Obesity was present in 36.1% patients after treatment, and was associated with preoperative obesity (p = 0.019), preoperative hypothalamic involvement (p = 0.047) and STR + RT (p = 0.011). CONCLUSIONS: Gross or near total resection may be achieved safely in almost 60% of cases; however, radical surgery does not eliminate the risk of recurrence. Over long-term follow-up, STR + RT offers the best disease control rates. Patients with preoperative hypothalamic involvement, obesity, and those with tumors not amenable to radical resection are at risk for developing obesity on long-term follow-up.				
554.	Sathish, T. and Kapoor, N. Normal weight obesity and COVID-19 severity: A poorly recognized link Diabetes Research and Clinical Practice; 2020, 169 Address: [Sathish, Thirunavukkarasu] McMaster Univ, Populat Hlth Res Inst, Hamilton, ON L8L 2X2, Canada. [Kapoor, Nitin] Christian Med Coll & Hosp , Dept Endocrinol Diabet & Metab, Vellore 632004, Tamil Nadu, India. [Kapoor, Nitin] Univ Melbourne, Melbourne Sch Populat & Global Hlth, Non Communicable Dis Unit, Melbourne, Vic 3053, Australia. Sathish, T (corresponding author), McMaster Univ, Populat Hlth Res Inst, Hamilton, ON L8L 2X2, Canada. speaktosat@gmail.com	INT	JUL TO DEC	Endocrinology	WOS:000598123600049
555.	Sathish, T., Kapoor, N., Cao, Y. T., Tapp, R. J. and Zimmet, P. Proportion of newly diagnosed diabetes in COVID-19 patients: A systematic review and meta-analysis Diabetes Obesity & Metabolism; Address: [Sathish, Thirunavukkarasu] McMaster Univ, Populat Hlth Res Inst PHRI, Hamilton, ON, Canada. [Kapoor, Nitin] Christian Med Coll & Hosp , Dept Endocrinol Diabet & Metab, Vellore, Tamil Nadu, India. [Kapoor, Nitin; Cao, Yingting] Univ Melbourne, Melbourne Sch Populat & Global Hlth, Non Communicable Dis Unit, Carlton, Vic, Australia. [Tapp, Robyn J.] Univ Melbourne, Melbourne Sch Populat & Global Hlth, Carlton, Vic, Australia. [Tapp, Robyn J.] Coventry Univ, Fac Hlth & Life Sci, Ctr Intelligent Healthcare, Coventry, W Midlands, England. [Zimmet, Paul] Monash Univ, Alfred Ctr, Cent Clin Sch, Melbourne, Vic, Australia. Sathish, T (corresponding author), McMaster Univ, Populat Hlth Res Inst, Hamilton, ON L8L 2X2, Canada. speaktosat@gmail.com	INT	JUL TO DEC	Endocrinology	WOS:000603147000001
556.	Sathishkumar, D. and Jacob, A. R. Learning to pop blisters in epidermolysis bullosa with a simple model Pediatr Dermatol; 2020, 37 (6): 1215-1217 Address: Department of Dermatology, Christian Medical College and Hospital, Vellore, India.	INT	JUL TO DEC	Dermatology, College of Nursing	PMID: 32951277

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	College of Nursing, Christian Medical College and Hospital, Vellore, India. Epidermolysis bullosa (EB) is a genetic disorder with skin fragility resulting in easy blistering of skin and mucous membranes. A plane of cleavage exists even where there is no visible blister, so new blisters should be drained as soon as possible to prevent their expansion. Although, learning how to drain blisters safely and painlessly without introducing infection is essential, it can be a major challenge, especially for new parents and children. To avoid demonstrating the technique directly on patient's skin, we have devised a simple teaching aid simulating a hand and forearm with multiple blisters, created with readily available materials. In our experience, we have found this low-cost model to be extremely useful to teach patients, families, and professional groups, how to drain EB blisters and it provides an effective, low-cost, painless substitute for real-life blisters, empowering parents and engaging children.				
557.	Sathishkumar, D., Muthusamy, K., Gupta, A., Malhotra, M., Thomas, M., Koshy, B., Jasper, A., Danda, S. and George, R. Co-occurrence of Aicardi-Goutières syndrome type 6 and dyschromatosis symmetrica hereditaria due to compound heterozygous pathogenic variants in ADAR1: a case series from India Clin Exp Dermatol; 2020, Address: Departments of, Department of, Dermatology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Department of, Paediatric Neurology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Department of, Developmental Paediatrics, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Department of, Radiology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Department of, Medical Genetics, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Aicardi-Goutières syndrome type 6 (AGS6) and dyschromatosis symmetrica hereditaria (DSH) are allelic disorders caused respectively by biallelic and heterozygous pathogenic variants in ADAR1. We report three unrelated children presenting with features of both AGS6 and DSH, two of whom had compound heterozygous pathogenic variants in ADAR1. We also describe the novel genetic variants in our cases and review the literature on association of ADAR1-related AGS6 and DSH with these phenotypes.	INT	JUL TO DEC	Dermatology, Paediatric Neurology, Developmental Paediatrics, Radiology, Medical Genetics	PMID: 33289110
558.	Sathishkumar, D., Ogboli, M. and Moss, C. Classification of aplasia cutis congenita: a twenty-five-year review of cases presenting to a tertiary paediatric dermatology department Clin Exp Dermatol; 2020, 45 (8): 994-1002 Address: Department of Dermatology, Birmingham Children's Hospital, Birmingham Women's and Children's NHS Foundation Trust, Birmingham, United Kingdom.	INT	JAN TO JUN	Dematology	PMID:32501579 H-INDEX:75 IF: 1.771 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Department of Dermatology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND: Aplasia cutis congenita (ACC) is a rare, congenital disorder characterized by localised or widespread absence of skin at birth with heterogeneous clinical presentation. The classification proposed by Frieden in 1986 is widely used. AIM: To establish whether, 34 years on, the Frieden classification still meets our needs. METHODS: We conducted a retrospective chart review of all patients with a diagnosis of ACC presenting over a 25-year period to a tertiary paediatric dermatology department. We noted demographic data, clinical characteristics such as number, location and morphology of the lesions, imaging and genetic results where available and other associated abnormalities and grouped them according to Frieden's classification. For type 6 ACC (Bart syndrome) we reviewed neonatal photographs of all babies born with epidermolysis bullosa (EB) over 5 years. RESULTS: Excluding type 6, there were 56 children with ACC. The scalp was involved in 82.1% and type 1 was the commonest type. Over 5 years, 13 of 108 (12%) neonates with EB were born with the appearance of type 6 ACC. Two children did not fit Frieden's original classification and one had a previously undescribed association of ACC with cleft palate - ectodermal dysplasia syndrome. CONCLUSION: We conclude that Frieden's classification remains valid with some modifications. Type 3 ACC probably represents a mosaic RASopathy syndrome. Type 7 could cover non-genetic ACC attributable to trauma. Type 8 should be sub-divided into teratogenic and infective. Type 9 covers at least 4 subgroups. The classification will continue to evolve as new genes and pathomechanisms emerge.</p>				
559.	<p>Sathyakumar, K., Mani, S., Pathak, G. H., Prabhu, K., Chacko, A. G. and Chacko, G. Neuroimaging of pediatric infratentorial tumors and the value of diffusion-weighted imaging (DWI) in determining tumor grade Acta Radiol; 2020, 284185120933219</p> <p>Address: [Sathyakumar, Kirthi; Mani, Sunithi; Pathak, Gayatri Harshe] Christian Med Coll & Hosp, Dept Radiol, Vellore 632004, Tamil Nadu, India. [Prabhu, Krishna; Chacko, Ari George] Christian Med Coll & Hosp, Dept Neurol Sci, Vellore, Tamil Nadu, India. [Chacko, Geeta] Christian Med Coll & Hosp, Dept Pathol, Vellore, Tamil Nadu, India. Sathyakumar, K (reprint author), Christian Med Coll & Hosp, Dept Radiol, Vellore 632004, Tamil Nadu, India. kirthi86s@yahoo.com</p> <p>BACKGROUND: Diffusion-weighted imaging (DWI) provides information about the cellular density of tumors. This feature is useful in grading and identifying different tumor types. PURPOSE: To assess the value of diffusion restriction and apparent diffusion coefficient (ADC) values in differentiating pediatric infratentorial tumors. MATERIAL AND METHODS: This was a retrospective review of the magnetic</p>	INT	JAN TO JUN	Radiology, Neurological Sciences, Pathology	<p>PMID:32539423 WOS:000542281700001 SCOPUS H-INDEX:69 IF: 1.586 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>resonance imaging (MRI) of 82 children (age range 1-16 years) with infratentorial tumors. Histopathological grading after surgical excision/biopsy was categorized as low grade (WHO grades I and II) (n=31; 29 pilocytic astrocytomas, 2 ependymomas) and high grade (WHO grade III and IV) (n=51; 40 medulloblastomas, 8 anaplastic ependymomas, 1 anaplastic astrocytoma, 2 atypical rhabdoid teratoid tumors [ATRT]). MRI features and ADC values were compared among tumor types and grades using a two-tailed t test, Mann-Whitney U test for continuous data and Chi-square test for categorical variables. RESULTS: Diffusion restriction and low ADC value was a feature of high-grade tumors (P<0.001). The mean ADC values of the low-grade and high-grade tumors were $1.567 \times 10^{-3} \text{mm}^2/\text{s}$ and $0.661 \times 10^{-3} \text{mm}^2/\text{s}$, respectively. Using $0.9 \times 10^{-3} \text{mm}^2/\text{s}$ as the cut-off value, the sensitivity, specificity, positive and negative predictive values for differentiating the grades was 87%, 100%, 100%, and 81.8%, respectively. Significant differences were found between the mean ADC values of the individual tumor types (P<0.05), except between medulloblastoma and ATRT. CONCLUSION: ADC values and visual assessment of diffusion restriction are useful in tumor grading. The individual tumor types can be identified by an algorithmic approach, using DWI in conjunction with other described MRI features.</p>				
560.	<p>Sathyakumar, R. and Chacko, G. Newer Concepts in the Classification of Pituitary Adenomas Neurol India; 2020, 68 (Supplement): S7-S12 Address: Department of Neuropathology, Christian Medical College, Vellore, Tamil Nadu, India. Department of General Pathology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>The classification of tumors of the pituitary gland has seen several changes in recent years. The 4(th) edition of the World Health Organization Classification of Tumours of Endocrine Organs, published in 2017, saw the introduction of a classification based on cell lineage using immunohistochemistry for both pituitary specific hormones as well as pituitary specific transcription factors. The term "hormone-producing" was thus replaced by "-troph." The other major change was that the entity of "atypical adenoma," which was introduced in the 2004 classification, to identify tumors with a poor prognosis, was removed as it failed to identify aggressive tumors. Instead, assessment of markers of proliferation, clinical parameters, such as invasive status and histological subtypes were recommended to identify tumors with aggressive potential. The diagnostic criteria for pituitary carcinoma, however, remained unchanged and continued to be defined as a tumor of adenohypophyseal cells that metastasize craniospinally or systemically. Null cell adenomas were more clearly defined as tumors that did not show any cell-type differentiation, lacking immunoeexpression of hormones as well as transcription factors. Since 2017, the classification has continued to evolve with the identification of aggressive histological variants. There is more recently a proposal to change the terminology from pituitary adenoma to pituitary neuroendocrine</p>	NAT	JUL TO DEC	Neuropathology, General Pathology	PMID:32611886

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	tumor (PitNET). This review summarizes the recent advances in the classification of pituitary adenomas.				
561.	<p>Sathyamurthy, A., Singh, A., Jose, T., Sebastian, P., Balakrishnan, R., Prabhu, A. J. and Backianathan, S. Multi-modality management of extraosseous Ewing sarcoma: 10-year experience from a tertiary care centre Journal of Radiotherapy in Practice; 2020, Address: Department of Radiation Oncology, Ida B Scudder Cancer Centre, Christian Medical College, Tamil Nadu, Vellore, India Department of Medical Oncology, Christian Medical College, Tamil Nadu, Vellore, India Department of Pathology, Christian Medical College, Tamil Nadu, Vellore, India</p> <p>Aim:To analyse the presentation, diagnosis and patterns of care of extraosseous Ewing sarcoma treated at our institution between 2008 and 2018.Methods:Electronic medical records of extraosseous Ewing sarcoma patients treated at our institution between January 2008 and April 2018 were reviewed. Kaplan-Meier curves were plotted to assess the overall and disease-free survival with 95% confidence intervals. A univariate analysis was carried out to assess the impact of variables such as surgical excision, completeness of surgery, completeness of chemotherapy and addition of radiation therapy on the survivorship.Results:The records of 65 patients treated at our institution were available for review. The mean age was 26.4 years. The most frequent sites of extraosseous Ewing tumour were kidney - 9/65 (13.8%) and brain - 10/65 (15.4%). Sixteen (24.6%) patients presented with inoperable/metastatic disease at diagnosis. The other 49 (75.4%) had localised disease at presentation. The median overall survival of the 49 non-metastatic patients was 46 months, and the disease-free survival was 45 months.Conclusion:Extraosseous Ewing sarcoma is a rare and aggressive tumour diagnosed by molecular techniques. Multi-modality treatment including surgical resection with wide margins, adjuvant radiation when indicated and completion of systemic chemotherapy results in optimum outcomes. © The Author(s), 2020. Published by Cambridge University Press.</p>	INT	JAN TO JUN	Radiation Oncology, Medical Oncology, Pathology	<p>SCOPUS H-INDEX:13 IF: 0.410 RESURCHIFY (2018/2019)</p>
562.	<p>Savarimuthu, M. K. and Nair, A. K. A case of isolated unilateral glossopharyngeal nerve palsy Clinical Medicine and Research; 2020, 18 (1): 37-41</p> <p>Address: Christian Medical College and Hospital, Department of Psychiatry, Bagayam, Vellore, Tamil Nadu, India Quincy Medical Center, Alzheimer's Disease Center, Quincy, MA, United States</p> <p>Isolated palsy of the glossopharyngeal nerve is rare.We report the case of an elderly patient with unilateral right glossopharyngeal nerve palsy secondary to extra cranial ischemia. On examination there was no other deficit other than an absent</p>	INT	JAN TO JUN	Psychiatry	<p>SCOPUS H-INDEX:51 IF: 1.605 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	right gag reflex. She was diagnosed clinically with ischemic stroke of the ninth nerve, and her daily dose of aspirin was increased from 81 mg to 325 mg. Magnetic resonance imaging of the brain showed a normal brainstem and cerebellum with patent intracranial circulation.Total resolution of the paralysis was seen 2 months later.The possible mechanisms suspected were diabetic or hypertensive stenosis of the vasa nervorum or compression of the ninth nerve by an internal carotid artery dissection or aneurysm. This article discusses the various etiologies and mechanisms of this rare condition. It is unique because of the nerve's location and relationship to other structures. © 2020 Marshfield Clinic Health System clinmedres.org				
563.	<p>Schmidt, S., Liu, Y., Hu, Z. H., Williams, K. M., Lazarus, H. M., Vij, R., Kharfan-Dabaja, M. A., Orti, G., Wiernik, P. H., Weisdorf, D., Kamble, R. T., Herzig, R., Wirk, B., Cerny, J., Bacher, U., Chaudhri, N. A., Nathan, S., Farhadfar, N., Aljurf, M., Gergis, U., Szer, J., Seo, S., Hsu, J. W., Olsson, R. F., Maharaj, D., George, B., Hildebrandt, G. C., Agrawal, V., Nishihori, T., Abdel-Azim, H., Alyea, E., Popat, U., Sobecks, R., Scott, B. L., Chakrabarty, J. H. and Saber, W.</p> <p>The Role of Donor Lymphocyte Infusion (DLI) in Post-Hematopoietic Cell Transplant (HCT) Relapse for Chronic Myeloid Leukemia (CML) in the Tyrosine Kinase Inhibitor (TKI) Era Biology of Blood and Marrow Transplantation; 2020, 26 (6): 1137-1143</p> <p>Address: [Schmidt, Sarah; Chakrabarty, Jennifer Holter] Univ Oklahoma, Dept Hematol Oncol, 800 NE 10th St, Oklahoma City, OK 73104 USA. [Liu, Ying; Hu, Zhen-Huan; Saber, Wael] Med Coll Wisconsin, CIBMTR Ctr Int Blood & Marrow Transplant Res, Dept Med, Milwaukee, WI 53226 USA. [Liu, Ying] Med Coll Wisconsin, Inst Hlth & Equ, Div Biostat, Milwaukee, WI 53226 USA. [Williams, Kirsten M.] Childrens Natl Hlth Syst, Childrens Res Inst, Washington, DC USA. [Lazarus, Hillard M.] Case Western Reserve Univ, Cleveland, OH 44106 USA. [Vij, Ravi] Washington Univ, Sch Med, Div Hematol & Oncol, St Louis, MO USA. [Kharfan-Dabaja, Mohamed A.] Mayo Clin, Blood & Marrow Transplant Program, Divs Hematol Oncol, Jacksonville, FL 32224 USA. [Orti, Guillermo] Vall dHebron Univ Hosp, Hematol Dept, Barcelona, Spain. [Wiernik, Peter H.] Our Lady Mercy Med Ctr, Bronx, NY USA. [Weisdorf, Daniel] Univ Minnesota, Dept Med, Med Ctr, Div Hematol Oncol & Transplantat, Box 736 UMHC, Minneapolis, MN 55455 USA. [Kamble, Rammurti T.] Baylor Coll Med, Ctr Cell & Gene Therapy, Div Hematol & Oncol, Houston, TX 77030 USA. [Herzig, Roger; Hildebrandt, Gerhard C.] Univ Kentucky, Markey Canc Ctr, Lexington, KY USA. [Wirk, Baldeep] Seattle Canc Care Alliance, Div Bone Marrow Transplant, Seattle, WA USA. [Cerny, Jan] Univ Massachusetts, Med Ctr, Dept Med, Div Hematol Oncol, Worcester, MA USA. [Bacher, Ulrike] Bern Univ Hosp, Dept Hematol, Inselspital, Bern, Switzerland. [Chaudhri, Naeem A.; Aljurf, Mahmoud] King Faisal Specialist Hosp & Res Ctr, Dept Oncol, Riyadh, Saudi Arabia. [Nathan, Sunita; Hsu, Jack W.] Rush Univ, Med Ctr, Chicago, IL 60612 USA. [Farhadfar, Noshah] Univ Florida, Coll Med, Dept Med, Div Hematol Oncol,</p>	INT	JAN TO JUN	Clinical Hematology	WOS:000536168600016 SCOPUS H-INDEX:114 IF: 3.599 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Gainesville, FL USA. [Gergis, Usama] New York Presbyterian Hosp, Weill Cornell Med Ctr, Hematol Malignancies & Bone Marrow Transplant, Dept Med Oncol, New York, NY USA. [Szer, Jeffrey] Peter MacCalluma Canc Ctr, Clin Hematol, Melbourne, Vic, Australia. [Szer, Jeffrey] Royal Melbourne Hosp, Melbourne, Vic, Australia. [Seo, Sachiko] Dokkyo Med Univ, Dept Hematol & Oncol, Mibu, Tochigi, Japan. [Olsson, Richard F.] Karolinska Inst, Dept Lab Med, Stockholm, Sweden. [Olsson, Richard F.] Uppsala Univ, Ctr Clin Res Sormland, Uppsala, Sweden. [Maharaj, Dipnarine] South Florida Bone Marrow Stem Cell Transplant In, Boynton Beach, FL USA. [George, Biju] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Agrawal, Vaibhav] Indiana Univ Sch Med, Div Hematol Oncol, Indianapolis, IN 46202 USA. [Nishihori, Taiga] H Lee Moffitt Canc Ctr & Res Inst, Dept Blood & Marrow Transplantat, Tampa, FL USA. [Abdel-Azim, Hisham] Univ Southern Calif, Childrens Hosp Los Angeles, Keck Sch Med, Div Hematol Oncol & Blood Ea Marrow Transplantat, Los Angeles, CA 90007 USA. [Alyea, Edwin] Dana Farber Canc Inst, Ctr Hematol Oncol, Boston, MA 02115 USA. [Popat, Uday] MD Anderson Canc Ctr, Houston, TX USA. [Sobecks, Ronald] Cleveland Clin Fdn, 9500 Euclid Ave, Cleveland, OH 44195 USA. [Scott, Bart L.] Fred Hutchinson Canc Res Ctr, 1124 Columbia St, Seattle, WA 98104 USA.</p> <p>Schmidt, S (reprint author), Univ Oklahoma, Dept Hematol Oncol, 800 NE 10th St, Oklahoma City, OK 73104 USA. Sarah-Schmidt@ouhsc.edu</p> <p>Treatment for relapse of chronic myeloid leukemia (CML) following hematopoietic cell transplantation (HCT) includes tyrosine kinase inhibitors (TKIs) with or without donor lymphocyte infusions (DLIs), but the most effective treatment strategy is unknown. This study was performed through the Center for International Blood and Marrow Transplant Research (CIBMTR) database. We retrospectively reviewed all patients reported to the CIBMTR registry from 2002 to 2014 who underwent HCT for CML and were alive 30 days postrelapse. A total of 215 HCT recipients relapsed and were analyzed in the following groups: (1) TKI alone (n = 128), (2) TKI with DLI (n = 48), and (3) DLI without TKI (n = 39). In multivariate analysis, disease status prior to HCT had a significant effect on overall survival (OS). Patients who received a DLI alone compared with a TKI with a DLI had inferior survival (hazard ratio, 2.28; 95% confidence interval, 1.23 to 4.24; P=.009). Those who received a TKI alone had similar survival compared with those who received a TKI with a DLI (P = .81). These data support that despite use of TKIs pretransplantation, TKI salvage therapy continues to provide significant survival following relapse in patients with CML following HCT. These data do not suggest that adding a DLI to a TKI adds an improvement in OS. (C) 2020 American Society for Transplantation and Cellular Therapy. Published by Elsevier Inc.</p>				
564.	<p>Sekar, S., Belavendra, A. and Jacob, P. M. Early Discharge and Selective Calcium Supplementation after Thyroidectomy Based on Post-Operative Day 1 Parathormone and Calcium Level: A Prospective Study</p>	NAT	JUL TO DEC	Biostatistics, Endocrine Surgery	PMID: 33088754 PMC:7540830

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Indian J Endocrinol Metab; 2020, 24 (4): 319-324 Address: Department of Endocrine and Breast Surgery, Velammal Medical College and Research Centre, Madurai, Tamil Nadu, India. Department of Biostatistics and, Christian Medical College, Vellore, Tamil Nadu, India. Department of Endocrine Surgery, Christian Medical College, Vellore, Tamil Nadu, India. AIM: This study aimed to evaluate a protocol using post thyroidectomy parathyroid hormone (PTH) levels on the day after surgery to facilitate early discharge of patients. METHODS: This prospective observational study was done in Christian Medical College, India over 1 year with 125 consecutive patients who had serum PTH and calcium values measured in the morning following thyroidectomy/first postoperative day (D1). Patients with no symptoms and signs of hypocalcemia and with serum calcium ≥ 8 mg/dL and PTH ≥ 6 pg/ml according to the protocol were discharged without supplements on D1. Patients were followed up and tested for a week after surgery in the outpatient clinic to assess hypocalcemia and readmission rates. RESULTS: Seventy five patients (60%) could be discharged early on D1 without calcium supplementation; only one patient had mild hypocalcemia symptoms managed with oral calcium supplements during outpatient follow-up within 1 week and none who followed the protocol required readmission. Temporary biochemical hypocalcemia was encountered in 36 patients (28.8%) including symptomatic hypocalcemia in 13 patients (10.4%). Among the 36 patients with hypocalcemia, 26 patients (72.2%) had a PTH level < 6 pg/ml. Three patients required intravenous calcium infusion to correct hypocalcemia. Sensitivity, specificity and positive predictive value, and ROC of PTH 6 pg/ml in predicting hypocalcemia were 70.5%, 94.5% and 83.3%, 0.86, respectively. The low PTH could also guide early supplementation of calcium and all the severe hypocalcemia patients had PTH lower than the cut off of 6 pg/ml. CONCLUSION: A PTH and calcium-based protocol can be effectively used for early discharge of thyroidectomy patients the day after surgery without calcium supplementation. The compliance of the patient for early discharge was good.</p>				
565.	<p>Sekhar, A. and Kang, G. Human challenge trials in vaccine development Semin Immunol; 2020, 50 101429 Address: Division of Gastrointestinal Sciences, Christian Medical College, Vellore, India. Division of Gastrointestinal Sciences, Christian Medical College, Vellore, India. Electronic Address: gkang@cmcvellore.ac.in. The increasing recent interest in human challenge studies or controlled human infection model studies for accelerating vaccine development has been driven by the recognition of the unique abilities of these studies to contribute to the understanding of response to infection and the performance of vaccines. With streamlining of ethical processes, conduct and supervision and the availability of</p>	INT	JUL TO DEC	Division of Gastrointestinal Sciences	PMID: 33262068 PMC:7700100 WOS:000600637500009

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	new investigative tools from immunophenotyping to glycobiology, the potential to derive valuable data to inform vaccine testing and development has never been greater. However, issues of availability and standardization of challenge strains, conduct of studies in disease endemic locations and the iteration between clinical and laboratory studies still need to be addressed to gain maximal value for vaccine development.				
566.	<p>Sekhar, D. Clinical profile of patients admitted to acute care ward in a tertiary care psychiatric hospital Indian Journal of Psychiatry; 2020, 62 S133-S133</p> <p>Address: [Sekhar, Divya] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India.</p>	NAT	JAN TO JUN	Psychiatry	<p>WOS:000540356200445 H-INDEX:30 IF: 1.500 RG (2018/2019)</p>
567.	<p>Selina, A., John, D., Loganathan, L. and Madhuri, V. Case report of a PRDM5 linked brittle cornea syndrome type 2 in association with a novel SLC6A5 mutation Indian J Ophthalmol; 2020, 68 (11): 2545-2547 Address: Department of Paediatric Orthopaedics, Christian Medical College; Centre for Stem Cell Research, A Unit of in Stem Bengaluru, Christian Medical College, Vellore, Tamil Nadu, India. Department of Ophthalmology, Christian Medical College, Vellore, Tamil Nadu, India. A 3-year-old girl presenting with blue sclera, hyperlaxity and developmental dysplasia of hip was found to have bilateral corneal thinning with astigmatism and keratoconus. By clinical exome sequencing, a frameshift mutation c.713_716 del TTTG p.(Val238Alafs*35) in PRDM5 gene causing brittle cornea syndrome 2 and a novel frameshift mutation c.401dup p.(Ser135Glufs*53) in SLC6A5 gene causing Hyperekplexia 3 were identified. No features of hyperekplexia were identified in proband. The novel homozygous mutation of SLC6A5 gene in the proband was presently asymptomatic but they were apprised of the possibility of developing neurological symptoms in the later years.</p>	NAT	JUL TO DEC	Paediatric Orthopaedics, Centre for Stem Cell Research, Ophthalmology	<p>PMID: 33120686 PMC:7774228</p>
568.	<p>Selina, A., Kandagaddala, M. and Madhuri, V. A Recurrent Biallelic Pathogenic Variant in TBXAS1 Gene Causing Ghosal Hematodiaphyseal Dysplasia Indian J Pediatr; 2020, Address: Department of Pediatric Orthopedics, Christian Medical College, Ida Scudder Road, Vellore, Tamil Nadu, India. Centre for Stem Cell Research, Christian Medical College, Ida Scudder Road, Vellore, Tamil Nadu, 632004, India. Department of Radiology, Christian Medical College, Ida Scudder Road, Vellore, Tamil Nadu, India. Department of Pediatric Orthopedics, Christian Medical College, Ida Scudder Road, Vellore, Tamil Nadu, India. madhuriwalter@cmcvellore.ac.in. Centre for Stem Cell Research, Christian Medical College, Ida Scudder Road, Vellore, Tamil Nadu, 632004, India. madhuriwalter@cmcvellore.ac.in.</p>	NAT	JUL TO DEC	Pediatric Orthopedics, Centre for Stem Cell Research, Radiology	<p>PMID:33244729 WOS:000593041400002</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
569.	<p>Selvaraj, D. S. S., Ommen, A. G. and Ebenezer, J. Coronoidoplasty in TMJ ankylosis treatment BMJ case reports; 2020, 13 (8): Address: Department of Dental and Oral Surgery, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India danielVellore@gmail.com. Department of Dental and Oral Surgery, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India.</p> <p>A 2-year-old boy was brought by his parents with complaints of difficulty in mouth opening for the past one and half years. He had difficulty in chewing and was malnourished, with developing facial asymmetry. He was diagnosed with right side temporomandibular joint ankylosis. We planned for surgical removal of the ankylotic mass. But we modified the treatment protocol. Instead of doing coronoidectomy after aggressive excision of the ankylotic mass as advocated by Kaban, we did a 'coronoidoplasty' after aggressive excision of the ankylotic mass. Coronoidotomy or coronoidectomy is one of the rungs in the treatment ladder that is followed in surgical management of temporomandibular joint ankylosis. But one of the postoperative complications after coronoidectomy is the open bite. The difficulty to close the mouth becomes more pronounced when bilateral coronoidectomy is done. However, 'coronoidoplasty', as we have done for this patient retains the action of the temporalis muscle on the mandible in closing the mouth, yet removes the mechanical interference of the coronoid process. Postoperatively the patient was able to clench his teeth well, chew properly and there was no open bite.</p>	INT	JUL TO DEC	Dental and Oral Surgery	PMID: 32843377 PMC:7449592
570.	<p>Selvaraj, J. U., Sujalini, B. B., Rohitson, M. S., George, A. A., Arvind, V. H. and Mishra, A. K. Identification of predictors of cerebrovascular infarcts in patients with tuberculous meningitis Int J Mycobacteriol; 2020, 9 (3): 303-308 Address: Department of Internal Medicine, Christian Medical College, Vellore, Tamil Nadu, India. Department of Dermatology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Radiology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Internal Medicine, St. Vincent Hospital, Worcester, MA 01545, USA. BACKGROUND: Tuberculous meningitis (TBM) remains common in developing countries. Cerebrovascular infarct (CI) in TBM occurs in 15%-57% of patients. Literature regarding the predictors of central nervous system (CNS) infarct in patients with TBM is scanty, and the outcome of these events is unknown. The aim of this study is to evaluate the predictors of CI among patients with TBM at a tertiary care center in South India and to compare the impact of CI on the prognosis and outcomes in terms of mortality and morbidity. METHODS: All patients who were confirmed to have TBM and CNS infarcts/stroke were included in this study retrospectively. Forty-six patients had appropriate imaging, and they were</p>	INT	JUL TO DEC	Internal Medicine, Dermatology, Radiology	PMID: 32862165

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	enrolled in the study as cases. Patients without infarct were matched with age and sex as controls. Details of the course of the disease, the extent of CNS involvement, and treatment were compared between the two arms. RESULTS: The mean age of patients with and without infarct was similar. The presence of basal meningeal inflammation, hydrocephalus, focal neurological deficit, and cranial nerve palsy, was higher in patients with infarct. Independent predictors of infarcts in a patient with TBM were Medical Research Council (MRC) staging of II or more, presence of focal neurological deficit, cranial nerve palsy, and presence of hydrocephalus, meningeal enhancement on neuroimaging. Presences of infarcts were independently associated with a higher odds ratio of 2.58 for poor outcome, 4.48 for a longer duration of hospital stay, and odds ratio of 8.85 for the requirement of multiple hospitalizations. CONCLUSION: CI involvement in TBM has higher morbidity, with longer stay, recurrent admission.				
571.	Selvin, S. S. T. and Kuriakose, T. An uncommon presentation of a refractory case of retinoblastoma Orbit; 2020, 1-2 Address: Ophthalmology, Christian Medical College, Vellore, India.	INT	JUL TO DEC	Ophthalmology	PMID: 32873110
572.	Seshadri, M. S. and Jacob John, T. Revised clinical criteria for COVID-19 clinical syndrome Christian Journal for Global Health; 2020, 7 (4): 61-62 Address: Department of Endocrinology Diabetes and Metabolism, Christian Medical College and Hospital, Vellore, India Thirumalai Mission Hospital, Vanapadi Road, Ranipet, India Department of Clinical Virology, Christian Medical College and Hospital, Vellore, India	NAT	JUL TO DEC	Clinical Virology	SCOPUS
573.	Seshadri, M. S. and John, T. J. COVID-19 epidemic: cocoon the elderly and the vulnerable J R Coll Physicians Edinb; 2020, 50 (2): 207-214 Address: Thirumalai Mission Hospital, Ranipet, Vellore, India , Email: mandalam.seshadri@gmail.com. CMC Hospital, Vellore, India.	INT	JAN TO JUN	Clinical Virology	PMID:32568304 SCOPUS H-INDEX:24 IF: 0.270 RG (2018/2019)
574.	Sethi, S. K., Mittal, A., Nair, N., Bagga, A., Iyenger, A., Ali, U., Sinha, R., Agarwal, I., Tavares, M. D., Abeyagunawardena, A., Hanif, M., Shreshtha, D., Moorani, K., Asim, S., Kher, V., Alhasan, K., Mourani, C., Al Riyami, M., Bunchman, T. E., McCulloch, M. and Raina, R. Pediatric Continuous Renal Replacement Therapy (PCRRT) expert committee recommendation on prescribing prolonged intermittent renal replacement therapy (PIRRT) in critically ill children Hemodialysis International; 2020, 24 (2): 237-251 Address: [Sethi, Sidharth Kumar; Sinha, Rajiv] Medanta, Medic, Pediat Nephrol,	INT	JAN TO JUN	Pediatrics	WOS:000514069500001 SCOPUS H-INDEX:44 IF: 1.737 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Gurgaon, India. [Kher, Vijay] Medanta, Kidney Inst, Pediat Nephrol, Gurgaon, India. [Bagga, Arvind] AIIMS, Pediat Nephrol, New Delhi, India. [Iyenger, Arpana] St Johns Med Coll, Pediat Nephrol, Bangalore, Karnataka, India. [Ali, Uma] Lilavati Hosp & Res Ctr, Pediat Nephrol, Mumbai, Maharashtra, India. [Ali, Uma] SRCC Childrens Hosp, Mumbai, Maharashtra, India. [Sinha, Rajiv] Natl Inst Child Hlth, Pediat Nephrol, Kolkata, India. [Agarwal, Indira] CMC Vellore, Pediat, Vellore, Tamil Nadu, India. [Mittal, Aliza] AIIMS, Pediat, Jodhpur, Rajasthan, India. [Nair, Nikhil] Case Western Reserve Univ, Dept Chem, Cleveland, OH 44106 USA. [Bunchman, Timothy E.] Virginia Commonwealth Univ, Pediat Nephrol & Transplantat, Childrens Hosp Richmond, Richmond, VA USA. [de Sousa Tavares, Marcelo] Univ Nove Julho UNINOVE, Pediat Nephrol, Sao Paulo, Brazil. [Abeyagunawardena, Asiri] Univ Peradeniya, Pediat Nephrol, Peradeniya, Sri Lanka. [Hanif, Mohammed] Bangladesh Inst Child Hlth, Pediat Nephrol, Dhaka, Bangladesh. [Shreshtha, Devender] KIST Med Coll, Pediat, Lalitpur, Nepal. [Moorani, Khemchand; Asim, Sadaf] Natl Inst Child Hlth, Pediat Nephrol, Karachi, Pakistan. [Alhasan, Khalid] King Saud Univ, Pediat Nephrol, Coll Med, Riyadh, Saudi Arabia. [Mourani, Chebl] Hotel Dieu France Hosp HDF, Pediat, Beirut, Lebanon. [Al Riyami, Mohammed] Royal Hosp, Pediat Nephrol, Muscat, Oman. [McCulloch, Mignon] Univ Cape Town, Pediat Nephrol, Cape Town, Western Cape, South Africa. [Raina, Rupesh] Akron Childrens Hosp, Pediat Nephrol, Akron, OH 44308 USA.</p> <p>Raina, R (reprint author), Akron Childrens Hosp, Dept Nephrol, 224 West Exchange St, Akron, OH 44302 USA. rraina@chmca.org</p> <p>Introduction Recently, prolonged intermittent renal replacement therapies (PIRRT) have emerged as cost-effective alternatives to conventional CRRT and their use in the pediatric population has started to become more prominent. However, there is a lack of consensus guidelines on the use of PIRRT in pediatric patients in an intensive care setting. Methods A literature search was performed on PubMed/Medline, Embase, and Google Scholar in conjunction with medical librarians from both India and the Cleveland Clinic hospital system to find relevant articles. The Pediatric Continuous Renal Replacement Therapy workgroup analyzed all articles for relevancy, proposed recommendations, and graded each recommendation for their strength of evidence. Results Of the 60 studies eligible for review, the workgroup considered data from 37 studies to formulate guidelines for the use of PIRRT in children. The guidelines focused on the definition, indications, machines, and prescription of PIRRT. Conclusion Although the literature on the use of PIRRT in children is limited, the current studies give credence to their benefits and these expert recommendations are a valuable first step in the continued study of PIRRT in the pediatric population.</p>				
575.	<p>Shankar, C., Jacob, J. J., Vasudevan, K., Biswas, R., Manesh, A., Sethuvel, D. P. M., Varughese, S., Biswas, I. and Veeraraghavan, B.</p> <p>Emergence of Multidrug Resistant Hypervirulent ST23 Klebsiella pneumoniae:</p>	INT	JUL TO DEC	Clinical Microbiology, Infectious Diseases, Nephrology	PMID: 33330125 PMC:7718023

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Multidrug Resistant Plasmid Acquisition Drives Evolution Front Cell Infect Microbiol; 2020, 10 575289 Address: Department of Clinical Microbiology, Christian Medical College and Hospital, Vellore, India. College of Biological Sciences, University of Minnesota, Saint Paul, MN, United States. Department of Infectious Diseases, Christian Medical College and Hospital, Vellore, India. Department of Nephrology, Christian Medical College and Hospital, Vellore, India. Department of Microbiology, Molecular Genetics and Immunology, University of Kansas Medical Centre, Kansas City, KS, United States.</p> <p>BACKGROUND: In recent years, the emergence of multidrug resistant hypervirulent K. pneumoniae (MDR hvKp) isolates poses severe therapeutic challenge to global public health. The present study used the complete genome sequence of two MDR hvKp isolates belonging to ST23 to characterize the phylogenetic background and plasmid diversity. METHODS: Two hvKp isolates from patients with bacteremia were sequenced using Ion Torrent PGM and Oxford Nanopore MinION platforms and assembled by hybrid genome assembly approach. Comparative genomics approaches were used to investigate the population structure, evolution, virulence, and antimicrobial resistance of MDR hvKp strains. RESULTS: The study isolates exhibited typical features of hvKp phenotypes associated with ST23. The convergence of multidrug resistance and hypervirulence were attributed by the presence of multiple plasmids including a 216 kb virulence plasmid and MDR plasmids belonging to IncA/C(2), IncFIB, IncX3, and ColKP3 groups. The insertion of catA1 gene into virulence plasmid was observed along with genetic factors such as aerobactin, salmochelin, and rmpA2 that confer hvKp's hypervirulent phenotype. The core genome single nucleotide polymorphism (SNP) phylogenetic analyses of the isolates showed the evolution of ST23 hvKp was predominantly driven by ICEKp acquisitions. CONCLUSION: To the best of our knowledge, this is the first report of MDR hvKp isolates of ST23 with insertion of catA1 gene into the virulence plasmid which presents the possibility of hotspot integration sites on the plasmids to aid acquisition of AMR genes. ST23 is no longer confined to susceptible strains of hvKp. Our findings emphasize the need for more studies on recombinant events, plasmid transmission dynamics and evolutionary process involving hvKp.</p>				
576.	<p>Shankar, C., Muthuirulandi Sethuvel, D. P., Neeravi, A. R., Venkatesan, M., Devanga Ragupathi, N. K., Anandan, S. and Veeraraghavan, B. Identification of plasmids by PCR based replicon typing in bacteremic Klebsiella pneumoniae Microb Pathog; 2020, 148 104429 Address: Department of Clinical Microbiology, Christian Medical College, Vellore, Tamil Nadu, India.</p>	INT	JUL TO DEC	Clinical Microbiology	<p>PMID: 32781101 WOS:000592503800001</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Department of Clinical Microbiology, Christian Medical College, Vellore, Tamil Nadu, India. Electronic Address: vbalaji@cmcvellore.ac.in.</p> <p>BACKGROUND: Klebsiella pneumoniae is a notorious pathogen with plasmid mediated resistance to all classes of antibiotics. It is important to determine the plasmid profile coding for resistance genes. Plasmid profile varies among geographical regions and tracking the types helps in determining the MDR and XDR K. pneumoniae spread especially in hospital setting. Aim of the present study was to determine the plasmid profile and types among bacteraemic K. pneumoniae.</p> <p>MATERIALS AND METHODS: Ninety consecutive K. pneumoniae collected over a period of three months from blood cultures were characterised by PCR for plasmid profile. Inc plasmid types were determined by PCR based replicon typing (PBRT) and carbapenemases were determined by multiplex PCR. For a subset of isolates hybrid assemblies were developed by sequencing with Ion Torrent and MinIon.</p> <p>RESULTS: Overall, PBRT showed 29% of isolates carried four plasmids including IncHI1B, IncFIA, IncFII(K) and IncR. The most common type of plasmid was IncHI1B (93%) followed by IncFII(K) (89%) and IncR (82%). IncFIA was predominant among carbapenem resistant isolates. Almost all plasmids identified in K. pneumoniae were AMR plasmids, except two isolates which had virulence plasmids. IncX3 plasmid observed in this study was previously reported to be self-disseminating. Furthermore, the hybrid genome sequencing revealed complete structural arrangements of plasmids, which would be missed in short-read sequencing. NDM and OXA48-like were co-produced in 59% of the carbapenem resistant isolates. bla(OXA-232) was present on ColKP3; aac(6)-lb3 and rmtF on IncFIB.</p> <p>CONCLUSION: Diverse plasmid profile among the successive K. pneumoniae isolates indicates the transfer of resistance genes through different types of plasmids. IncHI1B, IncFIA, IncFIIK and IncR were the prevalent plasmid types. Hybrid assembly revealed bla(OXA-232) was present on ColKP3 unlike global reports of IncL/M. Hybrid assemblies provide better plasmid structure that long and short read assemblies. There was no significant association of β-lactamases with specific Inc groups in this study.</p>				
577.	<p>Shannon C Duffy, Bsc, Sreenidhi Srinivasan, Phd, Megan a Schilling, Phd, Tod Stuber, Bsc, Sarah N Danchuk, Bsc, Joy S Michael, Profmd, Manigandan Venkatesan, Msc, Nitish Bansal, Phd, Sushila Maan, Profphd, Naresh Jindal, Phd, Deepika Chaudhary, Phd, Premanshu Dandapat, Phd, Robab Katani, Phd, Shubhada Chothe, Phd, Maroudam Veerasami, Phd, Suelee Robbe-Austerman, Phd, Nicholas Juleff, Phd, Vivek Kapur, Profphd and Marcel a Behr, Profmd</p> <p>Reconsidering Mycobacterium bovis as a proxy for zoonotic tuberculosis: a molecular epidemiological surveillance study</p> <p>Lancet Microbe . 2020 Jun;1(2):e66-e73. doi: 10.1016/S2666-5247(20)30038-0.</p> <p>ADDRESS: Department of Microbiology and Immunology (S C Duffy BSc, S N Danchuk BSc, Prof M A Behr MD), McGill International Tuberculosis Centre (S C</p>	INT	JUL TO DEC	Clinical Microbiology	<p>PMID: 32642742 PMCID: PMC7325494</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Duffy, S N Danchuk, Prof M A Behr), and Department of Medicine (Prof M A Behr), McGill University, Montreal, QC, Canada; Infectious Diseases and Immunity in Global Health Program, Research Institute of the McGill University Health Centre, Montreal, QC, Canada (S C Duffy, S N Danchuk, Prof M A Behr); Department of Animal Science and the Huck Institutes of the Life Sciences, The Pennsylvania State University, University Park, PA, USA (S Srinivasan PhD, M A Schilling PhD, R Katani PhD, S Chothe PhD, Prof V Kapur PhD); National Veterinary Services Laboratories, Animal and Plant Health Inspection Service, US Department of Agriculture, Ames, IA, USA (T Stuber BSc, S Robbe-Austerman PhD); Department of Clinical Microbiology, Christian Medical College Vellore, Vellore, India (Prof J S Michael MD, M Venkatesan MSc); Department of Veterinary Public Health and Epidemiology (N Bansal PhD, N Jindal PhD, D Chaudhary PhD), and Department of Animal Biotechnology (Prof S Maan PhD), College of Veterinary Sciences, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar, India; Eastern Regional Station, Indian Veterinary Research Institute, Indian Council of Agricultural Research, Kolkata, India (P Dandapat PhD); Cisgen Biotech Discoveries, Chennai, India (M Veerasami PhD); and the Bill & Melinda Gates Foundation, Seattle, WA, USA (N Juleff PhD)</p> <p>Summary: Background: Zoonotic tuberculosis is defined as human infection with <i>Mycobacterium bovis</i>. Although globally, India has the largest number of human tuberculosis cases and the largest cattle population, in which bovine tuberculosis is endemic, the burden of zoonotic tuberculosis is unknown. The aim of this study was to obtain estimates of the human prevalence of animal-associated members of the <i>Mycobacterium tuberculosis</i> complex (MTBC) at a large referral hospital in India. Methods: We did a molecular epidemiological surveillance study of 940 positive mycobacteria growth indicator tube (MGIT) cultures, collected from patients visiting the outpatient department at Christian Medical College (Vellore, India) with suspected tuberculosis between Oct 1, 2018, and March 31, 2019. A PCR-based approach was applied to subspecies cultures. Isolates identified as MTBC other than <i>M tuberculosis</i> or as inconclusive on PCR were subject to whole-genome sequencing (WGS), and phylogenetically compared with publicly available MTBC sequences from south Asia. Sequences from WGS were deposited in the National Center for Biotechnology Information Sequence Read Archive, accession number SRP226525 (BioProject database number PRJNA575883). Findings: The 940 MGIT cultures were from 548 pulmonary and 392 extrapulmonary samples. A conclusive identification was obtained for all 940 isolates; wild-type <i>M bovis</i> was not identified. The isolates consisted of <i>M tuberculosis</i> (913 [97.1%] isolates), <i>Mycobacterium orygis</i> (seven [0.7%]), <i>M bovis</i> BCG (five [0.5%]), and non-tuberculous mycobacteria (15 [1.6%]). Subspecies were assigned for 25 isolates by WGS, which were analysed against 715 MTBC sequences from south Asia. Among the 715 genomes, no <i>M bovis</i> was identified. Four isolates of cattle origin were dispersed among human sequences within <i>M tuberculosis</i> lineage 1, and the seven <i>M orygis</i> isolates from human MGIT cultures were dispersed among sequences</p>				

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	from cattle. Interpretation: M bovis prevalence in humans is an inadequate proxy of zoonotic tuberculosis. The recovery of M orygis from humans highlights the need to use a broadened definition, including MTBC subspecies such as M orygis, to investigate zoonotic tuberculosis. The identification of M tuberculosis in cattle also reinforces the need for One Health investigations in countries with endemic bovine tuberculosis. Funding: Bill & Melinda Gates Foundation, Canadian Institutes for Health Research.				
578.	<p>Sharma, A., Easow Mathew, M., Sriganesh, V. and Reiss, U. M. Gene therapy for haemophilia Cochrane Database Syst Rev; 2020, 4 (4): Cd010822</p> <p>Address: Bone Marrow Transplantation and Cellular Therapy, St. Jude Children's Research Hospital, Memphis, Tennessee, USA. South Asian Cochrane Network & Center, Prof. BV Moses Center for Evidence-Informed Health Care and Health Policy, Christian Medical College, Vellore, India. QMed Knowledge Foundation, Mumbai, India. Hematology Department, St Jude Children's Research Hospital, Memphis, Tennessee, USA.</p> <p>BACKGROUND: Haemophilia is a genetic disorder characterized by spontaneous or provoked, often uncontrolled, bleeding into joints, muscles and other soft tissues. Current methods of treatment are expensive, challenging and involve regular administration of clotting factors. Gene therapy for haemophilia is a curative treatment modality currently under investigation. This is an update of a published Cochrane Review. OBJECTIVES: To evaluate the safety and efficacy of gene therapy for treating people with haemophilia A or B. SEARCH METHODS: We searched the Cochrane Cystic Fibrosis & Genetic Disorders Group's Coagulopathies Trials Register, compiled from electronic database searches and handsearching of journals and conference abstract books. We also searched the reference lists of relevant articles and reviews. Date of last search: 17 April 2020. SELECTION CRITERIA: Eligible trials include randomised or quasi-randomised clinical trials, including controlled clinical trials comparing gene therapy (with or without standard treatment) with standard treatment (factor replacement) or other 'curative' treatment such as stem cell transplantation for individuals with haemophilia A or B of all ages who do not have inhibitors to factor VIII or IX. DATA COLLECTION AND ANALYSIS: No trials of gene therapy for haemophilia matching the inclusion criteria were identified. MAIN RESULTS: No trials of gene therapy for haemophilia matching the inclusion criteria were identified. AUTHORS' CONCLUSIONS: No randomised or quasi-randomised clinical trials of gene therapy for haemophilia were identified. Thus, we are unable to determine the safety and efficacy of gene therapy for haemophilia. Gene therapy for haemophilia is still in clinical investigation and there is a need for well-designed clinical trials to assess the long-term feasibility, success and risks of gene therapy for people with haemophilia.</p>	INT	JAN TO JUN	Cochrane South Asia	<p>PMID:32342499 PMC ID: PMC7192367 WOS:000529866800045 SCOPUS H-INDEX:261 IF: 7.755 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	PMC7192367 the Founder and Hon CEO of Quality Medical (QMed) Knowledge Foundation, a not-for-profit Trust in Mumbai, India. Through the Foundation she and her colleagues offer online courses, training and support for literature search, referencing and writing activities to health sciences students and professionals; Ulrike M Reiss: none known.				
579.	<p>Sharma, A., Goel, A., Moses, V., Keshava, S. N., Zachariah, U. G., Elias, E. and Eapen, C. E. Anticoagulating Budd-Chiari syndrome patients presenting with variceal bleed: A retrospective study J Gastroenterol Hepatol; 2020, 35 (8): 1397-1403</p> <p>Address: [Sharma, Anand; Goel, Ashish; Zachariah, Uday George; Elias, Elwyn; Eapen, Chundamannil Eapen] Christian Med Coll & Hosp, Dept Hepatol, Ida Scudder Rd, Vellore 632004, Tamil Nadu, India. [Moses, Vinu; Keshava, Shyamkumar Nidugala] Christian Med Coll & Hosp, Dept Radiol, Vellore, Tamil Nadu, India. [Elias, Elwyn] Univ Hosp Birmingham, Liver Unit, Birmingham, W Midlands, England. Sharma, A (reprint author), Christian Med Coll & Hosp, Dept Hepatol, Ida Scudder Rd, Vellore 632004, Tamil Nadu, India. andy.mmc@gmail.com</p> <p>BACKGROUND AND AIM: This aims to study incidence of re-bleeding on anticoagulation and survival of Budd-Chiari syndrome (BCS) patients presenting with variceal bleeding. METHODS: Budd-Chiari syndrome patients presenting with variceal bleed between 01/01/2007 and 01/05/2019 were retrospectively studied. Patients underwent endoscopic treatment ± endovascular therapy, followed by anticoagulation. Variceal re-bleed (on anticoagulation) and survival were studied. RESULTS: Of 376 BCS patients diagnosed during the study period, 40 (10.7%) patients, presenting with variceal bleed (age 33 [25-40] years; male patients 70%; Rotterdam score 1.13 [0.63-1.22]), Group 1 were compared with 40 randomly selected age-matched BCS patients presenting with ascites, no bleeds (40 [23-42] years; male patients 42.5%; Rotterdam score 1.11 [1.09-1.16]), Group 2. The commonest site of obstruction was hepatic vein (65%) in Group 1 and combined hepatic veins and inferior vena cava (57.5%) in Group 2 (P < 0.01). Thirty-six Group 1 patients underwent endoscopic intervention (variceal ligation, 33; sclerotherapy, 2; glue injection, 1). Endovascular intervention was performed in 30 Group 1 patients (angioplasty ± stent, 22; endovascular shunt, 8) and in 34 Group 2 patients (angioplasty ± stent, 26; endovascular shunt, 8). All 80 patients were started on anticoagulation. Variceal bleed on anticoagulation occurred in five patients in Group 1 and three patients in Group 2. One-year and 5-year survival were 94.2% and 87.5%, respectively, in Group 1 and 100% and 80%, respectively, in Group 2. CONCLUSIONS: About one-tenth of BCS patients present with variceal bleed. On management with endoscopic ± endovascular therapy, followed by anticoagulation, variceal re-bleed in these patients were comparable with those in</p>	INT	JAN TO JUN	Hepatology, Radiology	PMID:31900982 WOS:000507529400001 SCOPUS H-INDEX:125 IF: 3.632 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
580.	<p>BCS patients presenting with ascites and survival was excellent at 1 and 5 years.</p> <p>Sharma, A., Keshava, S. N., Eapen, A., Elias, E. and Eapen, C. E. An Update on the Management of Budd-Chiari Syndrome Dig Dis Sci; 2020, Address: Hepatology Department, Christian Medical College, Vellore, Tamil Nadu, India. Department of Interventional Radiology, Christian Medical College, Vellore, India. Department of Radiodiagnosis, Christian Medical College, Vellore, India. Liver Unit, University Hospitals Birmingham, Birmingham, UK. Hepatology Department, Christian Medical College, Vellore, Tamil Nadu, India. eapen@cmcvellore.ac.in.</p> <p>Budd-Chiari syndrome (BCS) is an uncommon condition, caused by obstruction to hepatic venous outflow. It is largely underdiagnosed, and a high index of suspicion is required for any patient with unexplained portal hypertension. The understanding of its etiology and pathology is improving with advances in diagnostic techniques. Recent studies reported an identifiable etiology in > 80% of cases. Myeloproliferative neoplasm (MPN) is the most common etiology, and genetic studies help in diagnosing latent MPN. Better cross-sectional imaging helps delineate the site of obstruction accurately. The majority of BCS patients are now treated by endovascular intervention and anticoagulation which have improved survival in this disease. Angioplasty of hepatic veins/inferior vena cava remains under-utilized at present. While surgical porto-systemic shunts are no longer done for BCS, liver transplantation is reserved for select indications. Some of the unresolved issues in the current management of BCS are also discussed in this review.</p>	INT	JUL TO DEC	Interventional Radiology, Radiodiagnosis	PMID: 32691382
581.	<p>Sharma, D., Sandhya, P., Vellarikkal, S. K., Surin, A. K., Jayarajan, R., Verma, A., Kumar, A., Ravi, R., Danda, D., Sivasubbu, S. and Scaria, V. Saliva microbiome in primary Sjögren's syndrome reveals distinct set of disease-associated microbes Oral Diseases; 2020, 26 (2): 295-301</p> <p>Address: Informatics and Big Data, CSIR Institute of Genomics and Integrative Biology (CSIR-IGIB), New Delhi, India Academy of Scientific & Innovative Research (AcSIR), CSIR-IGIB, New Delhi, India Department of Clinical Immunology and Rheumatology, Christian Medical College Hospital, Vellore, India Genomics and Molecular Medicine, CSIR Institute of Genomics and Integrative Biology, New Delhi, India</p> <p>Objective: This study systematically aims to evaluate the salivary microbiome in patients with primary Sjögren's syndrome (pSS) using 16S rRNA sequencing approach. Methods: DNA isolation and 16S rRNA sequencing was performed on saliva of 37 pSS and 35 control (CC) samples on HiSeq 2500 platform. 16S rRNA</p>	INT	JAN TO JUN	Clinical Immunology & Rheumatology	WOS:000506567200001 SCOPUS H-INDEX:83 IF: 2.625 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>sequence analysis was performed independently using two popular computational pipelines, QIIME and less operational taxonomic units scripts (LoTuS). Results: There were no significant changes in the alpha diversity between saliva of patients and controls. However, four genera including Bifidobacterium, Lactobacillus, Dialister and Leptotrichia were found to be differential between the two sets, and common between both QIIME and LoTuS analysis pipelines (Fold change of 2 and $p < .05$). Bifidobacterium, Dialister and Lactobacillus were found to be enriched, while Leptotrichia was significantly depleted in pSS compared to the controls. Exploration of microbial diversity measures (Chao1, observed species and Shannon index) revealed a significant increase in the diversity in patients with renal tubular acidosis. An opposite trend was noted, with depletion of diversity in patients with steroids. Conclusion: Our analysis suggests that while no significant changes in the diversity of the salivary microbiome could be observed in Sjögren's syndrome compared to the controls, a set of four genera were significantly and consistently differential in the saliva of patients with pSS. Additionally, a difference in alpha diversity in patients with renal tubular acidosis and those on steroids was observed. © 2019 John Wiley & Sons A/S. Published by John Wiley & Sons Ltd. All rights reserved</p>				
582.	<p>Sharma, N., Dhyani, A. K., Marepally, S. and Jose, D. A. Nanoscale lipid vesicles functionalized with a nitro-aniline derivative for photoinduced nitric oxide (NO) delivery Nanoscale Advances; 2020, 2 (1): 463-469</p> <p>Address: Department of Chemistry, National Institute of Technology (NIT)-Kurukshetra, Haryana, 136119, India Laboratory of Nanobioscience and Nanobiotechnology, Center for Stem Cell Research (CSCR), (A Unit of in Stem, Bengaluru), Christian Medical College Campus, Vellore, Tamil Nadu, 632002, India</p> <p>Nanoscale vesicles functionalized with a nitric oxide (NO) releasing molecule 4-nitro-3-(trifluoromethyl)aniline have been reported. The new NO-nano-vesicular donor material shows an effective photo-release of NO upon irradiation with blue light at 410 nm. The kinetics of NO release has been monitored by using simple spectroscopic techniques such as UV-Vis and fluorescence methods. Colorimetric Griess assay and fluorescence DAF assay have been used for the detection and quantification of NO released from vesicles. This new vesicular nanoscale NO donor has the advantages of facile preparation in water, capable of releasing NO in a pure aqueous medium, photo-controlled NO release, bio-compatibility and capacity to modulate the NO donor loading to achieve an essential amount of NO. This journal is © The Royal Society of Chemistry.</p>	INT	JAN TO JUN	Centre for Stem Cell Research	<p>SCOPUS H-INDEX:7 IF: 3.049 BIOXBIO (2018/2019)</p>
583.	<p>Sheth, M. C., Paul, R. R., Mathews, S. S. and Albert, R. R. Isolated Aspergillus Laryngitis: Spectrum, Management, and Review of Literature J Voice; 2020, Address: Department of ENT Unit -5, Christian Medical College,</p>	INT	JUL TO DEC	ENT Unit -5	PMID: 33004228

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Vellore, India. Electronic Address: meet.c.sheth@gmail.com. Department of ENT Unit -5, Christian Medical College, Vellore, India. PURPOSE: Isolated aspergillus laryngitis is rare and often diagnosed after surgical excision or biopsy for a suspected premalignant or malignant pathology. Unlike other systemic or localized aspergillosis, there are no specific guidelines for isolated laryngeal aspergillosis. Our experience of dealing with a wide variety of isolated laryngeal aspergillosis showed that this entity is very responsive to medical therapy, making extensive debridement (as often carried out in surgically accessible aspergillosis) unnecessary as it would invariably lead to long-term dysphonia. MATERIALS AND METHODS: A retrospective analysis of all cases of isolated aspergillus laryngitis that presented to our hospital over the past 5 years was carried out. All patients with confirmed histopathological diagnosis of aspergillus infection were included. RESULTS: Twelve patients (five males and seven females) aged 28-54 years, who were diagnosed with aspergillus laryngitis presented with dysphonia. The most common involved site was the true vocal cords. All patients underwent cautious biopsies either in the operating theatre or in-office using a channeled fiber-optic laryngoscope. On histopathological examination, eight had invasive aspergillus infection while others showed variety of noninvasive involvement including colonization of cysts and carcinoma in situ. The most common species isolated was <i>Aspergillus fumigatus</i>. Appropriate antifungal chemotherapy was prescribed after ruling out systemic involvement. None of the patients showed recurrence or residual lesions on follow-up and reported significantly improved voice. CONCLUSIONS: This study highlights the wide spectrum of presentation of isolated aspergillus laryngitis with <i>Aspergillus fumigatus</i> being the most common organism isolated. Even the invasive variant is a medically treatable condition with voriconazole being the drug of choice. The importance of cautious biopsies and resections for voice preservation is also emphasized. To our knowledge, this is the largest report on isolated aspergillus laryngitis.</p>				
584.	<p>Shetty, S., Cherian, K. E., Kapoor, N., Jebasingh, F. K., Cherian, A., Hephzibah, J., Chandramohan, A., John, R. A., Asha, H. S., Paul, M. J., Manipadam, M. T., Abraham, D. T., Thomas, N. and Paul, T. V. Does Baseline PTH Influence Recovery of Bone Mineral Density, Trabecular Bone Score and Bone Turnover Markers? A Prospective Study Following Curative PArathyroidectomy in Primary Hyperparathyroidism Endocr Pract; 2020, 26 (12): 1442-1450 Address: From the (1)Departments of Endocrinology. Endocrine Surgery. Nuclear Medicine. Radiology. General Pathology, Christian Medical College and Hospital, Vellore, India. From the (1)Departments of Endocrinology. Electronic Address: thomasvpaul@gmail.com.</p>	INT	JUL TO DEC	Endocrinology, Endocrine Surgery, General Pathology	PMID:33471736

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>OBJECTIVE: This prospective study was carried out to assess trabecular bone score, bone mineral density (BMD), and bone biochemistry in Indian subjects with symptomatic primary hyperparathyroidism (PHPT), and to study the influence of baseline parathyroid hormone (PTH) on recovery of these parameters following curative surgery. METHODS: This was a 2-year prospective study conducted at a tertiary care centre in southern India. Baseline assessment included demographic details, mode of presentation, bone mineral biochemistry, BMD, trabecular bone score (TBS), and bone turnover markers (BTMs). These parameters were reassessed at the end of the first and second years following curative parathyroid surgery. RESULTS: Fifty-one subjects (32 men and 19 women) with PHPT who had undergone curative parathyroidectomy were included in this study. The mean (SD) age was 44.6 (13.7) years. The TBS, BTMs, and BMD at lumbar spine and forearm were significantly worse at baseline in subjects with higher baseline PTH (≥ 250 pg/mL) when compared to the group with lower baseline PTH (< 250 pg/mL). At the end of 2 years, the difference between high versus low PTH groups (mean \pm SD) persisted only for forearm BMD (0.638 ± 0.093 versus 0.698 ± 0.041 g/cm²; $P = .01$). However, on follow-up visits in the first and second year after curative parathyroidectomy, there was no significant difference in BTMs, BMD at the femoral neck, lumbar spine, and TBS between the 2 groups stratified by baseline PTH. CONCLUSION: The BMD at the forearm remained significantly worse in individuals with high baseline PTH even at 2 years after surgery, while other parameters including TBS improved significantly from baseline. ABBREVIATIONS: 25(OH)D = 25-hydroxyvitamin D; BMD = bone mineral density; BMI = body mass index; BTMs = Bone turnover markers; CTX = C-terminal telopeptide of type 1 collagen; DXA = dual energy X-ray absorptiometry; P1NP = N-terminal propeptide of type 1 procollagen; PHPT = primary hyperparathyroidism; PTH = parathyroid hormone; TBS = trabecular bone score.</p>				
585.	<p>Shetty, S., John, B., Mohan, S. and Paul, T. V. Vertebral fracture assessment by dual-energy X-ray absorptiometry along with bone mineral density in the evaluation of postmenopausal osteoporosis Arch Osteoporos; 2020, 15 (1): 25</p> <p>Address: Department of Endocrinology, Kasturba Medical College, Manipal, Manipal Academy of Higher Education, Manipal, Karnataka, India. sahanashetty0606@gmail.com.</p> <p>Christian Medical College, Vellore, Tamil Nadu, India. Department of Endocrinology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>This is a cross-sectional study to look at the utility of DXA-VFA in addition to bone mineral density (BMD) in the evaluation of postmenopausal osteoporosis. Vertebral fracture (VF) was detected in more than two-thirds of postmenopausal</p>	INT	JAN TO JUN	Endocrinology	<p>PMID:32095943 WOS:000520441900001 SCOPUS H-INDEX:27 IF: 2.0 RG (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	women referred for DXA-BMD. Addition of DXA-VFA detected additional 27% with VF whose BMD were in the non-osteoporotic range. INTRODUCTION: VFs are the hallmark of osteoporotic fractures. Prevalent vertebral fractures are an independent risk factor for future fragility fractures. This study was conducted to look at the prevalence of VF by DXA-vertebral fracture assessment (VFA) and to study the utility of DXA-VFA in addition to bone mineral density (BMD) in the evaluation of osteoporosis. METHODS: A cross-sectional study of the postmenopausal women above the age of 50 years who were referred for BMD assessment by DXA. All subjects underwent VFA and BMD assessment by Hologic DXA. RESULTS: Four hundred postmenopausal women with a mean age of 62.7 ± 6.2 years underwent BMD and VFA assessment by DXA. Prevalent VF was seen in 261 (65.2%) subjects, of which 114 (28.5%) subjects, 135 (33.7%) subjects, and 12 (3%) subjects had mild, moderate, and severe VF, respectively. Among subjects with VF, 136 (52.1%) and 90 (34.5%) had BMD-defined osteoporosis at the spine and femur neck, respectively. Overall, 59% with VF had osteoporosis at either the spine or femur neck. Forty-one-percent subjects with VF had BMD in non-osteoporotic range at both sites, of which 20% had moderate-to-severe VF. Addition of DXA-VFA to BMD assessment detected additional 27% with VF whose BMD was in the non-osteoporotic range. CONCLUSION: VF was seen in more than two-thirds of the postmenopausal women referred for osteoporosis evaluation. VFA identified additional patients with VF whose BMD was not in the osteoporotic range. Incorporation of VFA to BMD will assist in documenting prevalent vertebral fracture which is an independent risk factor for incident fragility fracture irrespective of the BMD.				
586.	Shetty, S., Kapoor, N., Thomas, N. and Paul, T. V. DXA Measured Visceral Adipose Tissue, Total Fat, Anthropometric Indices and its Association With Cardiometabolic Risk Factors in Mother-Daughter Pairs From India J Clin Densitom; 2020, Address: Department of Endocrinology, Kasturba Medical College, Manipal, Manipal Academy of Higher Education, (MAHE), Manipal, India. Electronic Address: sahanashetty0606@gmail.com. Department of Endocrinology, Diabetes & Metabolism, Christian Medical College, Vellore, India. Visceral fat is the pathogenic fat depot associated with diabetes, dyslipidemia, and cardiovascular diseases. Estimation of visceral adipose tissue (VAT) by dual energy-X-ray absorptiometry (DXA) is a newer technique with less radiation exposure, shorter scanning time, and lower cost. In this study, we attempted to look at relationship between cardiometabolic risk factors and VAT, total body fat percent (TBF%) and anthropometry. We also studied the changes in body composition and metabolic parameters with menopause. The familial resemblance of VAT and TBF% in mother-daughter pair was also compared. This was a cross sectional community study of 300 women (150 postmenopausal mothers and 150 premenopausal daughters). Body composition indices by DXA and metabolic	INT	JUL TO DEC	Endocrinology, Diabetes & Metabolism	PMID: 32651111

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	parameters were assessed. The association between DXA-VAT, TBF%, anthropometric measures, and cardiometabolic risk factors were studied by correlation, receiver operating characteristics curves, and logistic regression analysis. VAT indices were significantly higher and lean indices lower in postmenopausal women as compared to premenopausal women. One fourth of postmenopausal women were categorized as metabolically obese normal weight. DXA-VAT was a better predictor of cardiometabolic risk factors as compared to waist circumference, body mass index, and TF% in postmenopausal women (AUC:0.68 vs 0.62, 0.60 & 0.5, respectively), whereas body mass index had a better prediction in premenopausal women(AUC:0.68). VAT area >100 cm ² had a significant association with the presence of ≥2 cardiometabolic risk factors (p = 0.04, OR: 2.2, CI:1.0-4.7) in the postmenopausal women. Daughters of the mothers with higher TBF% were found to have a higher TBF% compared to daughters of mothers with normal TBF% (36.2 ± 4.2 vs 32.2 ± 4.4, p = 0.03), similar resemblance was not seen for VAT. The study showed that the VAT increases and lean mass decreases with age and menopause. DXA measured VAT is a better predictor of cardiometabolic risk in postmenopausal women but not in premenopausal women. Total body fat may have a familial resemblance, but not the VAT which is determined by age, menopause, and probable life style factors.				
587.	Shukla, A., Acharya, R., Kumar, A., Mozumdar, A., Aruldas, K. and Saggurti, N. Client-provider interaction: understanding client experience with family planning service providers through the mystery client approach in India Sex Reprod Health Matters; 2020, 28 (1): 1822492 Address: Program Officer, Population Council, New Delhi, India. Associate II, Population Council, New Delhi, India. Senior Program Officer, Population Council, New Delhi, India. Implementation Science Coordinator, Deworm3 Study, Christian Medical College, Vellore, India. Director, Population Council, New Delhi, India. The benefits of employing a rights-based approach in family planning (FP) programmes have made the client's rights to informed choices and quality care an essential part of any such programme. client-provider interaction is one of the critical components of the quality of care (QoC) framework of FP. While several studies have assessed QoC in FP services in India, very few have focused on the in-depth assessment of the interaction between the client and the provider during service delivery. The present study used the mystery client approach to assess the quality of interactions between clients and FP service providers in two of the most populous states of India: Bihar and Uttar Pradesh (UP). Findings highlighted that the providers spent very little time with the clients, gave them information on only one or two FP methods, and rarely talked about possible side-effects of the methods. Furthermore, the providers seemed hesitant to suggest any FP method other than condoms to newly married women. This study concluded that despite being a government priority, the quality of client-provider interaction in these two	INT	JUL TO DEC	Family Medicine	PMID: 33054696 PMC:7566859

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
588.	<p>states was extremely poor.</p> <p>Shukla, A., Kumar, A., Mozumdar, A., Aruldas, K., Acharya, R., Ram, F. and Saggurti, N. Association between modern contraceptive use and child mortality in India: A calendar data analysis of the National Family Health Survey (2015-16) SSM Popul Health; 2020, 11 100588</p> <p>Address: Population Council, Zone 5A, Ground Floor India Habitat Centre, Lodi Road, New Delhi, 110003, India. Christian Medical College, Vellore, India.</p> <p>BACKGROUND: Influence of contraceptive use on increased gap between successive births and attributed reduced risk of child deaths is well documented in developing countries. However, there is scarcity of evidence on direct contribution of contraceptive use on child survival especially in Indian context. METHODS: Using information given in the reproductive calendar history of the National Family Health Survey of India conducted in 2015-16, this study examines the effect of modern contraceptive use on childhood mortality - infant mortality rate (IMR) and under-five mortality rate (U5MR). Bivariate analysis and cox proportional hazard model is applied in the study. RESULTS: Finding reveals that use of reversible contraceptives prior to birth resulted in low childhood mortality rates. IMR is 35 per 1000 live births among births with preceding use of modern reversible contraceptives as compared to 44 per 1000 live births among births with no use. Similarly, U5MR is 41 per 1000 live births as compared to 61 per 1000 live births among births with preceding use of contraceptive and no use respectively. The use of reversible modern contraceptives prior to birth is protective against child mortality even among births with preceding birth interval of less than 24 months. CONCLUSIONS: This study provides evidence of dual benefit of contraceptive use. Such information is important for promoting evidence-based advocacy to expand use of family planning services. This will help the country to achieve Sustainable Development Goal 3.2 which calls for end of preventable deaths during childhood.</p>	INT	JAN TO JUN	Biostatistics	PMID:32382651 PMC ID: PMC7200929 SCOPUS H-INDEX:17 IF: 1.220 RG (2018/2019)
589.	<p>Shyamasundar, L. G., Kandagaddala, M., Jennifer, A. and Palocaren, T. A rare presentation of primary lymphoma of bone with aneurysmal bone cyst-like changes Skeletal Radiol; 2020, Address: Department of Orthopaedics, Bangalore Baptist hospital, Bengaluru, Karnataka, India. Department of Radiology, Christian Medical College, Vellore, Tamilnadu, India. Department of General pathology, Christian Medical College, Vellore, Tamilnadu, India. Department of Pediatric Orthopaedics, Christian Medical College, Vellore, Tamilnadu, India. thomaspalox@cmcvellore.ac.in. Primary lymphoma of bone occurs rarely in children with variable imaging findings ranging from a lytic lesion to an aggressive permeative lesion. We detail a case</p>	INT	JUL TO DEC	Radiology, General pathology, Pediatric Orthopaedics	PMID: 33044565

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	report with review of literature of a 14-year-old boy with a rare presentation of primary lymphoma of bone with aneurysmal bone cyst-like changes. The lesion was surgically excised as management for aneurysmal bone cyst but histopathological examination of the excised tissue revealed a non-Hodgkin's type of lymphoma. This unique type of aneurysmal bone cyst-like presentation has not been well characterised until now in the imaging spectrum of primary lymphoma of bone. Clinicians need to be aware of this uncommon presentation for early intervention and appropriate management of this malignancy in children.				
590.	Shyamasundar, L. G., Loganathan, L., Kumar, A., Selina, A. and Madhuri, V. MATN3 Mutation Causing Spondyloepimetaphyseal Dysplasia Indian Journal of Pediatrics; 2020, 87 (3): 227-228 Address: Pediatric Orthopedic Unit, Christian Medical College, Ida Scudder Road, Vellore , Tamil Nadu 632004, India	NAT	JAN TO JUN	Pediatric Orthopedics	SCOPUS H-INDEX: 46 IF: 1.136 BIOXBIO (2018/2019)
591.	Simha, A., Braganza, A., Abraham, L., Samuel, P. and Lindsley, K. B. Anti-vascular endothelial growth factor for neovascular glaucoma The Cochrane database of systematic reviews; 2020, 2 CD007920 Address: [Simha, Arathi; Abraham, Lekha] Christian Med Coll & Hosp , Dept Ophthalmol, Vellore 632001, Tamil Nadu, India. [Braganza, Andrew] Johns Hopkins Univ, Sch Med, Wilmer Eye Inst, Baltimore, MD 21205 USA. [Samuel, Prasanna] Christian Med Coll & Hosp , Dept Biostat, Vellore , Tamil Nadu, India. [Lindsley, Kristina B.] IBM Watson Hlth, Life Sci Oncol & Genom, Baltimore, MD USA. Simha, A (reprint author), Christian Med Coll & Hosp , Dept Ophthalmol, Vellore 632001, Tamil Nadu, India. arathisimha@rediffmail.com Background Neovascular glaucoma (NVG) is a potentially blinding, secondary glaucoma. It is caused by the formation of abnormal new blood vessels, which prevent normal drainage of aqueous from the anterior segment of the eye. Anti-vascular endothelial growth factor (anti-VEGF) medications are specific inhibitors of the primary mediators of neovascularization. Studies have reported the effectiveness of anti-VEGF medications for the control of intraocular pressure (IOP) in NVG. Objectives To assess the effectiveness of intraocular anti-VEGF medications, alone or with one or more type of conventional therapy, compared with no anti-VEGF medications for the treatment of NVG. Search methods We searched CENTRAL (which contains the Cochrane Eyes and Vision Trials Register); MEDLINE; Embase; PubMed; and LILACS to 22 March 2019; metaRegister of Controlled Trials to 13 August 2013; and two additional trial registers to 22 March 2019. We did not use any date or language restrictions in the electronic search for trials. Selection criteria We included randomised controlled trials (RCTs) of people treated with anti-VEGF medications for NVG. Data collection and analysis Two review authors independently assessed the search results for trials, extracted data,	INT	JAN TO JUN	Ophthalmology, Biostatistics	WOS: 000517176800023 SCOPUS H-INDEX: 261 IF: 1.605 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>and assessed risk of bias, and the certainty of the evidence. We resolved discrepancies through discussion. Main results We included four RCTs (263 participants) and identified one ongoing RCT. Each trial was conducted in a different country: China, Brazil, Egypt, and Japan. We assessed the trials to have an unclear risk of bias for most domains due to insufficient information. Two trials compared intravitreal bevacizumab combined with Ahmed valve implantation and panretinal photocoagulation (PRP) with Ahmed valve implantation and PRP. We did not combine these two trials due to substantial clinical and statistical heterogeneity. One trial randomised participants to receive an injection of either an intravitreal anti-VEGF medication or placebo at the first visit, followed by non-randomised treatment according to clinical findings after one week. The last trial randomised participants to PRP with and without ranibizumab, but details of the study were unavailable for further analysis. Two trials that examined IOP showed inconsistent results. One found inconclusive results for mean IOP between participants who received anti-VEGF medications and those who did not, at one month (mean difference [MD] -1.60 mmHg, 95% confidence interval [CI] -4.98 to 1.78; 40 participants), and at one year (MD 1.40 mmHg, 95% CI -4.04 to 6.84; 30 participants). Sixty-five percent of the participants with anti-VEGF medications achieved IOP ≤ 21 mmHg, versus 60% without anti-VEGF medications. In another trial, those who received anti-VEGF medications were more likely to reduce their IOP than those who did not receive them, at one month (MD -6.50 mmHg, 95% CI -7.93 to -5.07; 40 participants), and at one year (MD -12.00 mmHg, 95% CI -16.79 to -7.21; 40 participants). Ninety-five percent of the participants with anti-VEGF medications achieved IOP ≤ 21 mmHg, versus 50% without anti-VEGF medications. The certainty of a body of evidence was low for this outcome due to limitations in the design and inconsistency of results between studies. Post-operative complications included anterior chamber bleeding (3 eyes) and conjunctival hemorrhage (2 participants) in the anti-VEGF medications group, and retinal detachment and phthisis bulbi (1 participant each) in the control group. The certainty of evidence is low due to imprecision of results and indirectness of evidence. No trial reported the proportion of participants with improvement in visual acuity, proportion of participants with complete regression of new iris vessels, or the proportion of participants with relief of pain and resolution of redness at four- to six-week, or one-year follow-up. Authors' conclusions Currently available evidence is uncertain regarding the long-term effectiveness of anti-VEGF medications, such as intravitreal ranibizumab or bevacizumab or aflibercept, as an adjunct to conventional treatment in lowering IOP in NVG. More research is needed to investigate the long-term effect of these medications compared with, or in addition to, conventional surgical or medical treatment in lowering IOP in NVG.</p>				
592.	<p>Sindhu, K. N., Srinivasan, M., Moses, P. D., Thomas, M., John, J. and Rose, W. Substultus Tendinum in a Child with Typhoid Fever Indian Pediatr; 2020, 57 (4): 374-375</p>	NAT	JAN TO JUN	Wellcome Research Unit, Neurological Sciences, Community Health, Pediatrics Infectious Disease	<p>PMID:32284487 WOS:000528586900027 SCOPUS H-INDEX:49</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Address: [Sindhu, Kulandaipalayam Natarajan; Srinivasan, Manikandan; Moses, Prabhakar D.] Christian Med Coll & Hosp, Wellcome Trust Res Lab, Div Gastrointestinal Sci, Vellore, Tamil Nadu, India. [Thomas, Maya] Christian Med Coll & Hosp, Dept Neurol Sci, Vellore, Tamil Nadu, India. [John, Jacob] Christian Med Coll & Hosp, Dept Community Hlth, Vellore, Tamil Nadu, India. [Rose, Winsley] Christian Med Coll & Hosp, Dept Paediat, Dept Pediat Infect Dis, Vellore, Tamil Nadu, India.</p> <p>Rose, W (reprint author), Christian Med Coll & Hosp, Dept Paediat, Dept Pediat Infect Dis, Vellore, Tamil Nadu, India. winsleyrose@cmcvellore.ac.in</p> <p>A 5-year-old male child with blood culture confirmed typhoid fever presented with twitching over the left scapular region. Contrast computerized tomography and electroencephalogram were normal. Following treatment with azithromycin and clonazepam, the twitching subsided. Subsultus tendinum, a rare neurological complication of typhoid fever, resolves spontaneously with treatment.</p>				IF: 1.163 BIOXBIO (2018/2019)
593.	<p>Singh, A. S., Fouzia, N. A., Sindhuvi, E., George, B., Mathews, V., Abraham, A. and Srivastava, A.</p> <p>Demography of carriers undergoing prenatal diagnosis for haemophilia in India Haemophilia; 2020, 26 96-96</p> <p>Address: [Singh, Abraham Sunder; Fouzia, N. A.; Sindhuvi, Eunice; George, Biju; Mathews, Vikram; Abraham, Aby; Srivastava, Alok] Christain Med Coll, Dept Haematol, Vellore, Tamil Nadu, India.</p>	INT	JAN TO JUN	Clinical Haematology	WOS:000536674800169 H-INDEX:88 IF: 3.590 BIOXBIO (2018/2019)
594.	<p>Singh, A., Danda, D., Hussain, S., Najmi, A., Mathew, A., Goel, R., Lakhan, S. E., Tajudheen, B. and Antony, B.</p> <p>Efficacy and safety of tocilizumab in treatment of Takayasu arteritis: A systematic review of randomized controlled trials Modern Rheumatology; 2020:8</p> <p>Address: [Singh, Ambrish; Antony, Benny] Univ Tasmania, Menzies Inst Med Res, 17 Liverpool St, Hobart, Tas 7000, Australia. [Danda, Debashish; Mathew, Ashish; Goel, Ruchika] Christian Med Coll & Hosp, Dept Clin Immunol & Rheumatol, Vellore, Tamil Nadu, India. [Hussain, Salman] Jamia Hamdard, Sch Pharmaceut Educ & Res, Div Pharmacol, Dept Pharmaceut Med, New Delhi, India. [Najmi, Abul Kalam] Jamia Hamdard, Sch Pharmaceut Educ & Res, Dept Pharmacol, New Delhi, India. [Lakhan, Shaheen E.] Carilion Clin, Roanoke, VA USA. [Lakhan, Shaheen E.] Virginia Tech, Blacksburg, VA USA. [Tajudheen, Belzik] Jamia Salafia Pharm Coll, Pulikkal, India. Antony, B (reprint author), Univ Tasmania, Menzies Inst Med Res, 17 Liverpool St, Hobart, Tas 7000, Australia. benny.eathakkattuantony@utas.edu.au</p> <p>Background: Takayasu arteritis (TAK) is a chronic immune vasculitis in which Interleukin-6 (IL-6) receptors play a key role in pathogenesis. Tocilizumab (TCZ),</p>	INT	JAN TO JUN	Clinical Immunology and Rheumatology	WOS:000513797900001 SCOPUS H-INDEX:54 IF: 1.973 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>an IL-6 receptor antagonist with a favorable safety and efficacy profile, has been tried as an option for patients with TAK. This systematic review analyzed the evidence from randomized control trials (RCT) assessing the safety and efficacy of TCZ in patients with TAK. Methods: MEDLINE, Embase, the Cochrane Library, and clinical trial registries were searched from inception to July 2018. We included RCT assessing the efficacy and safety of TCZ versus placebo/other comparators for the treatment of patients with TAK. The risk of bias (RoB) was assessed using Cochrane RoB tool. Results: 2799 identified articles were screened as per abstract and title; 42 selected full-texts articles were assessed for the potential inclusion. One trial, reported in two publications, comparing subcutaneous TCZ (162 mg/week) versus matching placebo in 36 patients with TAK was included. The relapse-free rate at 24 weeks was 50.6% and 22.9% in TCZ and placebo arm, respectively. The hazard ratio (HR) for time to first relapse was statistically significant in the per-protocol population (HR 0.34 [95.41% CI, 0.11-1.00]; p = .0345), while non-significant in the intention-to-treat population (HR 0.41 [95.41% CI, 0.15-1.10]; p = .0596). The serious adverse events were higher in the placebo arm. Conclusions: This systematic review finds the existing evidence from RCT on efficacy and safety profile of TCZ in TAK to be promising but limited. Additional evidence is required to draw a stronger conclusion.</p>				
595.	<p>Singhal, M., Prabhash, K., Babu, G., Chaturvedi, P., Kuriakose, M., Birur, P., Anand, A. K., Kaushal, A., Mahajan, A., Syiemlieh, J., Gairola, M., Ramachandra, P., Goyal, S., John, S., Nayyar, R., Patil, V. M., Rao, V., Roshan, V. and Rath, G. K.</p> <p>Indian clinical practice consensus guidelines for the management of laryngeal cancer</p> <p>Indian journal of cancer; 2020, 57 S19-S21</p> <p>Address: Department of Medical Oncology, Indraprastha Apollo Hospital, New Delhi, India Department of Medical Oncology, Tata Memorial Hospital, Mumbai, Maharashtra, India Department of Medical Oncology, Kidwai Memorial Institute of Oncology, BangaloreKarnataka, India Department of Surgical Oncology, Tata Memorial Hospital, Mumbai, Maharashtra, India Department of Surgical Oncology, Cochin Cancer Research Centre, Cochin, Kerala, India Department of Oral Medicine and Radiology, KLE Society's Institute of Dental Sciences (KLESIDS), BangaloreKarnataka, India Department of Radiation Oncology, Max Super Speciality Hospital, New Delhi, India Department of Medical Oncology, HCG Cancer Centre, Ahmedabad, Gujarat, India Department of Radiodiagnosis and Imaging, Tata Memorial Hospital, Mumbai, Maharashtra, India Department of Radiation Oncology, Civil Hospital, Shillong, Meghalaya, India</p>	NAT	JAN TO JUN	Radiotherapy	<p>WOS:000518668700006 SCOPUS H-INDEX:36 IF: 0.429 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Department of Radiation Oncology, Rajiv Gandhi Cancer Institute & Research Centre, New Delhi, India</p> <p>Department of Radiation Oncology, Sri Shankara Cancer Hospital and Research Centre, BangaloreKarnataka, India</p> <p>Department of Medical Oncology, Rajiv Gandhi Cancer Institute & Research Centre, New Delhi, India</p> <p>Department of Radiotherapy, Christian Medical College, Vellore, Tamil Nadu, India</p> <p>Department of Surgical Oncology, Max Super Speciality Hospital, New Delhi, India</p> <p>Department of Surgical Oncology, HCG Cancer Centre ,BangaloreKarnataka, India</p> <p>Department of Radiation Oncology, Shri Mata Vaishno Devi Narayana Superspeciality Hospital, Jammu, India</p> <p>Department of Radiation Oncology, National Cancer Institute, All India Institute of Medical SciencesDelhi, India</p>				
596.	<p>Sinha, R., Vasudevan, A., Agarwal, I., Sethi, S. K., Saha, A., Pradhan, S., Ekambaram, S., Thaker, N., Matnani, M., Banerjee, S., Sharma, J., Singhal, J., Ashraf, S. and Mandel, K.</p> <p>Congenital Nephrotic Syndrome in India in the Current Era: A Multicenter Case Series</p> <p>Nephron; 2020, 144 (1): 21-29</p> <p>Address: [Sinha, Rajiv] Inst Child Hlth, Div Paediat Nephrol, Kolkata, India. [Sinha, Rajiv] Apollo Gleneagles Hosp, Dept Paediat, Kolkata, India. [Vasudevan, Anil] St Johns Med Coll Hosp, Dept Paediat Nephrol, Bengaluru, India. [Agarwal, Indira] Christian Med Coll & Hosp, Div Paediat Nephrol, Vellore, Tamil Nadu, India. [Sethi, Sidharth Kumar] Kidney Inst, Pediat Nephrol, The Medicity, Gurgaon, India. [Saha, Abhijeet] Lady Hardinge Med Coll & Hosp, Dept Paediat, New Delhi, India. [Pradhan, Subal] SVPPGIP&SCB Med Coll, Dept Paediat, Cuttack, India. [Ekambaram, Sudha] Mehta Multispecial Hosp India Pvt Ltd, Chennai, Tamil Nadu, India. [Thaker, Nilam] Children Nephrol Ctr, Dept Paediat Nephrol, Ahmadabad, Gujarat, India. [Matnani, Manoj] KEM Hosp, Pune, Maharashtra, India. [Matnani, Manoj] Jehangir Hosp, Pune, Maharashtra, India. [Banerjee, Sushmita] Calcutta Med Res Inst, Kolkata, India. [Sharma, Jyoti; Singhal, Jyoti] KEM Hosp, Dept Med Genet, Pune, Maharashtra, India. [Ashraf, Shazia] Harvard Med Sch, Boston Childrens Hosp, Boston, MA 02115 USA. [Mandel, Kausik] Sanjay Gandhi Post Grad Inst Med Sci, Lucknow, Uttar Pradesh, India.</p> <p>Sinha, R (reprint author), Inst Child Hlth, 37G Bondel Rd, Kolkata 700019, India. rajivsinha_in@yahoo.com</p> <p>Background: There is a paucity of information on epidemiology, diagnosis, and treatment outcomes of congenital nephrotic syndrome (CNS) in developing countries. Methods: Retrospective (2012-2017) review of case records undertaken across 12 Indian pediatric nephrology centers. Results: Sixty-five children (58%</p>	INT	JAN TO JUN	Pediatric Nephrology	<p>WOS:000507641200004</p> <p>SCOPUS</p> <p>H-INDEX:71</p> <p>IF: 0.770 RG (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	male, median birth weight 2.4 kg [interquartile range (IQR) 2.1-2.86]) were identified with CNS. Nearly half (45%) were preterm with previous history of fetal loss/sibling death in 22% and history of consanguinity in a third. No infective etiology was confirmed. Genetic reports available for 15 (23%) children identified causal mutations in 10 (8 in NPHS1 [1 novel variant], 1 in WT 1 [novel variant], and 1 in PLCE-1 gene). In addition, 1 child was clinically diagnosed as Galloway Mowat syndrome. Next-generation sequencing showed 80% yield and Sanger sequencing 20%. Albumin infusion and angiotensin-converting enzyme inhibitors were used initially in around two-third of cohort, while only 12% of children received indomethacin. Totally, 22 (34%) children were lost to follow-up after initial visit, and among the rest median follow-up was 69 days (IQR 20-180) with 18 (42%) deaths. Eight children showed partial response (including 2 with NPHS1 compound mutation), 1 complete response, and all of them were alive at last follow-up in contrast to 53% mortality among nonresponders, p = 0.004. Conclusion: This largest reported series on CNS from India revealed suboptimal management with poor outcome as well as low number of CNS being subjected to genetic evaluation.				
597.	<p>Sinha, S., Biswas, M., Chatterjee, S. S., Kumar, S. and Sengupta, A. Pbrm1 Steers Mesenchymal Stromal Cell Osteolineage Differentiation by Integrating PBAF-Dependent Chromatin Remodeling and BMP/TGF-beta Signaling Cell Reports; 2020, 31 (4): 26</p> <p>Address: [Sinha, Sayantani; Biswas, Mayukh; Chatterjee, Shankha Subhra; Sengupta, Amitava] Indian Inst Chem Biol, Canc Biol & Inflammatory Disorder Div, Stem Cell & Leukemia Lab, CSIR, 4 Raja SC Mullick Rd, Kolkata 700032, W Bengal, India. [Sinha, Sayantani; Biswas, Mayukh; Chatterjee, Shankha Subhra; Sengupta, Amitava] TRUE, CN 6,Sect 5, Kolkata 700091, W Bengal, India. [Kumar, Sanjay] Christian Med Coll & Hosp, Ctr Stem Cell Res, Vellore 632002, Tamil Nadu, India. Sengupta, A (reprint author), Indian Inst Chem Biol, Canc Biol & Inflammatory Disorder Div, Stem Cell & Leukemia Lab, CSIR, 4 Raja SC Mullick Rd, Kolkata 700032, W Bengal, India.; Sengupta, A (reprint author), TRUE, CN 6,Sect 5, Kolkata 700091, W Bengal, India. amitava.sengupta@iicb.res.in</p> <p>Bone morphogenic protein (BMP)/transforming growth factor beta (TGF-beta) signaling determines mesenchymal-stromal-cell (MSC) osteolineage commitment and tissue identity. However, molecular integration of developmental signaling with MSC-intrinsic chromatin regulation remains incompletely understood. SWI/SNF-(BAF) is an ATP-dependent chromatin remodeler implicated in multi-cellular development. We show that BMPs and long-term osteogenic signals in MSCs selectively induce expression of polybromo BAF (PBAF) components Pbrm1, Arid2, and Brd7. Loss of Pbrm1/Arid2/Brd7 profoundly impairs osteolineage gene expression and osteogenesis without compromising adipogenesis. Pbrm1 loss attenuates MSC in vivo ossification. Mechanistically, Pbrm1/PBAF deficiency impairs Smad1/5/8 activation through locus-specific epi-genomic remodeling,</p>	INT	JAN TO JUN	Centre for Stem Cell Research	WOS:000529070000019 SCOPUS H-INDEX:130 IF: 7.815 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	involving Pbrm1 bromodomains, along with transcriptional downregulation of Bmpr/Tgf beta rII affecting BMP-early-responsive gene expression. Gain of function of BmprI beta, Tgf beta rII in PBAF-deficient MSCs partly restores Smad1/5/8 activation and osteogenesis. Pbrm1 loss further affects hematopoietic stem and progenitor activity through non-cell-autonomous regulation of microenvironment and niche-factor expression. Together, these findings reveal a link illustrating epi-genomic feedforward control of BMP/TGF-beta signaling to transcriptional and cellular plasticity in the mesenchymal microenvironment and account for stromal SWI/SNF in hematopoiesis.				
598.	<p>Sivamurukan, P., Boddu, D., Pulimood, A. and Agarwal, I. An Unusual Presentation of Hemorrhagic Disease in an Infant: A Probable Case of Abetalipoproteinemia J Pediatr Hematol Oncol; 2020, Address: Departments of Child Health. Pathology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>We report a probable case of abetalipoproteinemia in an infant who presented with unusual symptoms of late-onset vitamin K deficiency. Abetalipoproteinemia is a rare autosomal recessive disease caused by mutation of the microsomal triglyceride transfer protein gene, resulting in the absence of microsomal triglyceride transfer protein function in the small bowel. It is characterized by the absence of plasma apolipoprotein B-containing lipoproteins, fat malabsorption, hypocholesterolemia, retinitis pigmentosa, progressive neuropathy, myopathy, and acanthocytosis. A biopsy of the small intestine characteristically shows marked lipid accumulation in the villi of enterocytes. Large supplements of fat-soluble vitamins A, D, E, and K have been shown to limit neurological and ocular manifestations. Dietary fat intake is limited to medium-chain triglycerides.</p>	INT	JAN TO JUN	Child Health, Pathology	PMID:32433446 SCOPUS H-INDEX:75 IF: 0.947 BIOXBIO (2018/2019)
599.	<p>Sivanandan, A., Abel, S. R., Sanjay, M., Chandran, J., Gunasekaran, K. and Abhilash, K. P. P. Profile and outcome of patients presenting with agrochemical poisoning to the emergency department J Family Med Prim Care; 2020, 9 (3): 1589-1593</p> <p>Address: Department of Emergency Medicine, Christian Medical College, Vellore, Tamil Nadu, India. Department of Emergency Medicine, Accident and Emergency Care Technology, Paramedic, Department of Emergency Medicine, Christian Medical College, Vellore, Tamil Nadu, India. Department of Paediatric ICU, Christian Medical College, Vellore, Tamil Nadu, India. Department of General Medicine, Christian Medical College, Vellore, Tamil Nadu, India.</p>	NAT	JAN TO JUN	Emergency Medicine, Paediatric ICU, General Medicine	PMID:32509655 PMC ID: PMC7266212 H-INDEX:NA IF: 0.210 RG (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>BACKGROUND: Deliberate self-harm (DSH) is one of the leading causes of mortality and morbidity in India. Agrochemicals are the most commonly used compounds for DSH. The spectrum of Agrochemicals in use varies from region to region and time period with newer compound being regularly introduced into the market. METHODOLOGY: This retrospective cohort study included patients presenting with agrochemical poisoning to the ED during January 2017 to December 2018. Patient data was retrieved from the ED triage registry software and clinical workstation, following which their hospital outcome was determined. RESULTS: During the study period, 1802 patients presented with DSH among which Agrochemical poisoning comprised 33.5% (604/1802). The mean age was 31 years and incidence of agrochemical poisoning was found to be higher in young adults (16-30 years-55.8%). The prevalence was more common in males (62.4%). The common agrochemical compounds consumed were insecticides (91%), herbicides (4.3%), fungicides (1.5%), fertilizer (1.5%), and plant growth regulators (1.5%). Majority (80.96%) of the patients were discharged alive from the hospital, 17% left against medical advice due to bad prognosis and 12 patients (2%) died in the hospital. CONCLUSION: Insecticides (mainly Organophosphates) are the most common agrochemicals used for DSH. Their management is better understood leading to better outcomes compared to other chemicals. The proportion of agrochemical use in DSH has reduced over the last decade. Imidacloprid (Insecticide) and Plant growth regulators are the new compounds for which appropriate management is not yet established and more research is needed.</p>				
600.	<p>Smith, A., Anandan, S., Veeraraghavan, B. and Thomas, N. Colonization of the preterm neonatal gut with carbapenem-resistant Enterobacteriaceae and its association with neonatal sepsis and maternal gut flora Journal of Global Infectious Diseases; 2020, 12 (2): 101-104</p> <p>Address: Department of Neonatology, Christian Medical College, Vellore, Tamil Nadu, 632 004, India Department of Microbiology, Christian Medical College, Vellore, Tamil Nadu, India</p> <p>Background: Multidrug-resistant Gram-negative neonatal sepsis is associated with high mortality and morbidity. Mucosal colonization with these organisms in hospitals may predispose neonates to septicemia. Aims: The aim of the study was to determine the prevalence and pattern of colonization of neonatal preterm gut with carbapenem-resistant Enterobacteriaceae and identify risk factors associated with colonization. Settings and Design: The study was a prospective observational study done in a Level 3 neonatal unit of a tertiary care hospital. Methods: Stool samples from preterm babies were collected soon after birth and at 1 and 3 weeks of age after consent. Maternal stool sample was collected within 48 h after the delivery. Predetermined antenatal, neonatal, and environmental risk factors were recorded. Isolation and identification of organisms was done in a standardized</p>	NAT	JAN TO JUN	Neonatology, Microbiology	<p>SCOPUS H-INDEX:22 IF: 2.150 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	manner; antibiotic susceptibility was done by the Kirby-Bauer method and results interpreted according to the Clinical and Laboratory Standards Institute guidelines. Results: Seventy-one percent of the babies were colonized by Gram-negative bacteria (GNB) at birth, and 100% were colonized by the end of the 1st week. The organisms commonly isolated were Escherichia coli, Klebsiella, NFGNB (Nonfermenting Gram-Negative Bacilli), Pseudomonas, and Enterobacter. Sixty-eight percent of the babies were colonized with extended-spectrum beta-lactamase-producing organisms, and 5% of the babies were colonized with carbapenem-resistant organisms (CROs). In the babies who developed culture-positive sepsis, 21% had concordance of strains in the gut and blood. There was no association between maternal and neonatal colonization. Conclusions: The results show that neonatal gut is colonized by GNB from birth onward. However, the rate of colonization with CRO is low. An association was also observed between colonization and late-onset sepsis. © 2020 Journal of Global Infectious Diseases IF: Published by Wolters Kluwer - Medknow.				
601.	<p>Solaimalai, D., Rathore, S., Beck, M. M., Regi, A., Yesudhasan, B. L., Veeraraghavan, B. and Prakash, J. A. J. Enzyme-linked immunosorbent assay (ELISA) versus Venereal Disease Research Laboratory test (VDRL) and rapid plasma reagin test (RPR) for screening of syphilis in pregnant women Int J Gynaecol Obstet; 2020, 150 (1): 103-107</p> <p>Address: [Solaimalai, Dhanalakshmi; Yesudhasan, Binesh L.; Veeraraghavan, Balaji; Prakash, John A. J.] Christian Med Coll & Hosp, Dept Clin Microbiol, Vellore, Tamil Nadu, India. [Rathore, Swati; Beck, Manisha M.; Regi, Annie] Christian Med Coll & Hosp, Dept Obstet & Gynaecol, Vellore, Tamil Nadu, India. Prakash, JAJ (reprint author), Christian Med Coll & Hosp, Dept Clin Microbiol, Vellore, Tamil Nadu, India. johnajpp@gmail.com</p> <p>OBJECTIVE: To evaluate a treponemal enzyme-linked immunosorbent assay (ELISA) as an alternative screening test for syphilis in pregnant women. METHODS: A cross-sectional study of diagnostic test accuracy was carried out in a large volume laboratory from a tertiary care center. A total of 416 serum samples, including 102 archived syphilis Treponema pallidum hemagglutination (TPHA)-positive samples and 314 samples from pregnant women, were used to determine the sensitivity and specificity of ELISA. All the samples were subjected to Venereal Disease Research Laboratory (VDRL), rapid plasma reagin (RPR), ELISA, and TPHA tests. Performance characteristics of VDRL, RPR, and ELISA were calculated with TPHA as a reference standard test. RESULTS: VDRL and RPR exhibited higher false positivity of 10.5% and 9.6%, respectively, compared to 2.5% by ELISA. The sensitivity and specificity of ELISA were 98% and 97.5%, of VDRL were 71.6% and 89.5%, and of RPR were 73.5% and 90.5%, respectively. Moreover, ELISA had an excellent agreement ($\kappa=0.9$) with TPHA compared to VDRL/RPR which had a</p>	INT	JAN TO JUN	Clinical Microbiology, Obstetrics and Gynaecology	PMID:32246772 WOS:000527904800001 SCOPUS H-INDEX:NA IF: 1.671 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	moderate agreement ($\kappa=0.6$) only. CONCLUSION: ELISA has the potential to replace VDRL/RPR as a screening test for syphilis in centers that can perform ELISA, especially for antenatal screening.				
602.	Solomon, T., Benjamin, L., Singh, B., Lant, S. and Ellul, M. A. Provisional case definitions for COVID-19-associated neurological disease – Authors' reply The Lancet Neurology; 2020, 19 (11): 891-892 Address: National Institute for Health Research Health Protection Research Unit in Emerging and Zoonotic Infections, Institute of Infection, Veterinary and Ecological Sciences, University of Liverpool, Liverpool, L69 7BE, United Kingdom The Walton Centre National Health Service Foundation Trust, Liverpool, United Kingdom Queen Square Institute of Neurology, University College London, London, United Kingdom Christian Medical College, Vellore, India	INT	JUL TO DEC	Neurological Sciences	SCOPUS
603.	Soman, R., Bakthavatchalam, Y. D., Nadarajan, A., Dwarakanathan, H. T., Venkatasubramanian, R. and Veeraraghavan, B. Is it time to move away from polymyxins?: evidence and alternatives Eur J Clin Microbiol Infect Dis; 2020, Address: Department of Infectious Diseases, Jupiter Hospital, Pune, India. Department of Clinical Microbiology, Christian Medical College, Vellore , Tamil Nadu, 632 004, India. Department of Surgery, Christian Medical College, Vellore , India. Department of Orthopaedics, Christian Medical College, Vellore , India. Department of Infectious Diseases, Apollo Hospitals, Chennai, India. Department of Clinical Microbiology, Christian Medical College, Vellore , Tamil Nadu, 632 004, India. vbalaji@cmcvellore.ac.in. Increasing burden of carbapenem resistance and resultant difficult-to-treat infections are of particular concern due to the lack of effective and safe treatment options. More recently, several new agents with activity against certain multidrug-resistant (MDR) and extensive drug-resistant (XDR) Gram-negative pathogens have been approved for clinical use. These include ceftazidime-avibactam, meropenem-vaborbactam, imipenem-cilastatin-relebactam, plazomicin, and cefiderocol. For the management of MBL infections, clinically used triple combination comprising ceftazidime-avibactam and aztreonam is hindered due to non-availability of antimicrobial susceptibility testing methods and lack of information on potential drug-drug interaction leading to PK changes impacting its safety and efficacy. Moreover, in several countries including Indian subcontinent and developing countries, these new agents are yet to be made available. Under these circumstances, polymyxins are the only last resort for the treatment of carbapenem-resistant infections. With the recent evidence of suboptimal PK/PD particularly in lung environment, limited efficacy and increased nephrotoxicity associated with polymyxin use, the Clinical and Laboratory Standards Institute	INT	JUL TO DEC	Clinical Microbiology, Surgery, Orthopaedics	PMID: 33009595

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	(CLSI) has revised both colistin and polymyxin B breakpoints. Thus, polymyxins 'intermediate' breakpoint for Enterobacterales, P. aeruginosa, and Acinetobacter spp. are now set at ≤ 2 mg/L, implying limited clinical efficacy even for isolates with the MIC value 2 mg/L. This change has questioned the dependency on polymyxins in treating XDR infections. In this context, recently approved ceftiderocol and phase 3 stage combination drug cefepime-zidebactam assume greater significance due to their potential to act as polymyxin-supplanting therapies.				
604.	<p>Sreedhar, S., Rathore, S., Benjamin, S., Gowri, M. and Mathews, J. E. Expectant versus immediate delivery in women with PPRM between 34 and 35(+6) weeks: A Retrospective cohort J Family Med Prim Care; 2020, 9 (7): 3225-3229 Address: Department of Obstetrics and Gynecology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>CONTEXT: Studies comparing the efficacy of expectant management (EM) and immediate delivery (ID) in the management of women with preterm prelabor rupture of membranes (PPROM) between 34 and 35(+6) weeks have not been done in a developing country. Although large multicentric studies show better outcomes with EM, the economic implications have not been studied. AIMS: This study compared women with PPRM between 34 and 35 (+6) weeks, managed expectantly with women who were delivered immediately. SETTINGS AND DESIGN: Large tertiary center and retrospective cohort. METHODS AND MATERIALS: Data of 206 women with PPRM between 34 and 35(+6) weeks managed with immediate delivery in the years 2014 and 2015 were compared with seventy-five women with PPRM managed expectantly in the years 2016 and 2017. STATISTICAL ANALYSIS USED: Data was summarized using mean standard deviation (SD) or median interquartile range for continuous variables and frequency and percentage for categorical variables. Continuous variables were compared using independent t-test and categorical variables were compared using Chi-square statistics. RESULTS: Neonatal sepsis was seen in 1/75 (1.3%) in the group managed expectantly and 12/206 (5.8%) in the ID group (P = 0.109). Respiratory distress was seen in 3/75 (4%) in the group managed expectantly and 22/206 (10.7%) with ID (P = 0.08). Chorioamnionitis was similar in both groups. Cesarean rate was 17.3% with expectant management and 28% with ID (P = 0.065). The mean hospital bill was ₹.33,494/- in the ED group and ₹.27,079/- in the ID group (P < 0.001). CONCLUSIONS: Expectant management was more expensive.</p>	NAT	JUL TO DEC	Obstetrics and Gynecology, Biostatistics	<p>PMID: 33102274 PMC:7567214</p>
605.	<p>Sridharan, K., Cherian, K. E., Kapoor, N. and Paul, T. V. A curious case of bony streaks and stripes due to osteopathia striata Postgraduate Medical Journal; 2020, 96 (1134): 238-238</p> <p>Address: [Sridharan, Kalyani; Cherian, Kripa Elizabeth; Kapoor, Nitin; Paul, Thomas Vizhalil] Christian Med Coll & Hosp, Dept Endocrinol Diabet & Metab,</p>	INT	JAN TO JUN	Endocrinology	<p>WOS:000523470000017 SCOPUS H-INDEX:94 IF: 1.946 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Vellore , Tamil Nadu, India. Cherian, KE (reprint author), Christian Med Coll & Hosp , Dept Endocrinol Diabet & Metab, Vellore 632004, Tamil Nadu, India. kripaec@gmail.com				
606.	Sridharan, K., Cherian, K. E., Kurian, M. E., Asha, H. S., Paul, T. V. and Kapoor, N. Utility of anthropometric indicators in predicting osteoporosis in ambulant community dwelling rural postmenopausal women from southern India Trop Doct; 2020, 50 (3): 228-232 Address: Assistant professor, Department of Endocrinology, Diabetes and Metabolism, Christian Medical College & Hospital, Vellore , Tamil Nadu, India. Research officer, Department of Endocrinology, Diabetes and Metabolism, Christian Medical College & Hospital, Vellore , Tamil Nadu, India. Professor, Department of Endocrinology, Diabetes and Metabolism, Christian Medical College & Hospital, Vellore , Tamil Nadu, India. Associate Professor, Department of Endocrinology, Diabetes and Metabolism, Christian Medical College & Hospital, Vellore , Tamil Nadu, India. Kapoor, N (reprint author), Christian Med Coll & Hosp , Dept Endocrinol Diabet & Metab, Vellore 632004, Tamil Nadu, India. nitin.endocrine@gmail.com Osteoporosis is characterised by low bone mineral density (BMD) and is a significant public health problem in India. This cross-sectional study was done to assess the relationship between various anthropometric measures and BMD in 308 rural dwelling South Indian postmenopausal women. Anthropometric variables such as weight, body mass index (BMI), waist circumference (WC), hip circumference (HC) and neck circumference (NC) were measured. BMD was assessed by dual-energy X-ray absorptiometry (DXA) scan at the lumbar spine (LS) and femoral neck (NOF). The mean age \pm SD of study participants was 60.7 ± 7.8 years. All anthropometric variables showed positive correlation with BMD at NOF and LS ($P < 0.05$). Weight showed the best correlation ($r = 0.482$ for NOF and 0.412 for LS; $P < 0.001$). On multivariate logistic regression, age and weight remained significant for predicting femoral neck osteoporosis while weight and WC were the best predictors for LS osteoporosis. These anthropometric measures may serve as surrogate markers for osteoporosis and thus be used to screen postmenopausal women for referral to a centre with fewer limited resources.	INT	JAN TO JUN	Endocrinology	PMID:32419634 WOS:000533972900001 SCOPUS H-INDEX:32 IF: 0.591 BIOXBIO (2018/2019)
607.	Srinivas, R., Jacob, T. J. K., Raj, P. M., Korula, S. and Mathew, L. G. Paediatric mucormycosis: tailoring surgical strategies to compliment antifungal chemotherapy. Different strokes for different folks Trop Doct; 2020, 50 (1): 87-90 Address: Department of Paediatric Surgery, Christian Medical College, Vellore , India. Lecturer, Department of Microbiology, Christian Medical College, Vellore , India.	INT	JAN TO JUN	Paediatric Surgery, Microbiology, Paediatric Endocrinology, Pediatric Haematology and Oncology	PMID:31928201 WOS:000506920100023 SCOPUS H-INDEX:32 IF: 0.591 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Department of Paediatric Endocrinology and Metabolism, Christian Medical College, Vellore, India. Professor and Head, Department of Paediatric Haematology and Oncology, Christian Medical College and Hospital, Vellore, India.</p> <p>Jacob, TJK (reprint author), Christian Med Coll & Hosp, Unit 1, Dept Paediat Surg, Vellore 632004, Tamil Nadu, India. tarunjtk@gmail.com</p> <p>Children manifesting soft-tissue fungal infections are uncommonly seen, more so the subgroup of invasive soft-tissue mucormycosis. Invasive fungal infections in various organs respond differently and are often complicated by an immune-compromised host. Repeated and aggressive clearance of disease till an infection-clear margin is obtained is the mainstay of surgical therapy. This is coupled with appropriate antifungal therapy and the management of any underlying medical conditions. From our experience, we propose a surgical algorithm for therapy of soft-tissue mucormycosis in children.</p>				
608.	<p>Srinivasan, M., Reddy, M. M., Sarkar, S. and Menon, V. Depression, Anxiety, and Stress among Rural South Indian Women-Prevalence and Correlates: A Community-Based Study Journal of Neurosciences in Rural Practice; 2020, 11 (1): 78-83</p> <p>Address: Division of Gastrointestinal Sciences, Wellcome Trust Research Laboratory, Christian Medical College, Vellore, India Department of Community Medicine, Sri Devaraj Urs Medical College, Kolar, Karnataka, India Department of Community Medicine, Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Puducherry, India Department of Psychiatry, Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Puducherry, 605008, India</p> <p>Background The burden of common mental disorders (CMDs) which includes depression, anxiety, and stress-related disorders are on the rise in India. Women in rural areas form one of the high-risk groups with respect to CMDs due to their compromised status of living. Objective The aim of the study was to estimate the prevalence of depression, anxiety, and stress, and the predictors to depression among women in rural Puducherry. Methods A community-based, cross-sectional study was performed in 2016, among women aged 18 to 59 years, residing in the rural area of Puducherry. Prevalence of CMDs was determined using the Depression Anxiety Stress Scale (DASS)-21. Using a systematic random sampling method, women were interviewed in their houses. The socio-demographic characteristics along with risk factors for depression were captured using a semi-structured proforma. A multivariable logistic regression model was used to</p>	INT	JAN TO JUN	Wellcome Research Unit	<p>SCOPUS H-INDEX:144 IF: 2.315 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
610.	<p>Srinivasan, R., Ganesan, S. K., Premkumar, P. S. and Kang, G. Influence of publicly funded conditional cash transfer programmes on utilization patterns of healthcare services for acute childhood illness International health; 2020, 12 (4): 339-343 Address: Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences, Christian Medical College, Vellore, Tamil Nadu 632004, India. BACKGROUND: Conditional cash transfers are widespread and effective for utilization of targeted health services, but there is little evidence of their influence on the utilization of non-targeted or extended general healthcare services. Using data from a population-based health utilization survey, we evaluated the influence of conditional cash transfers for maternal and immunization services on the utilization of healthcare services for acute childhood illnesses. METHODS: Participants included mothers or primary caretakers of children <2 y of age residing in 2407 households in urban Vellore, Tamil Nadu, India. Mothers of children with illness in the preceding month were interviewed on presenting symptoms, provider choice and beneficiary status of maternal and immunization-based conditional cash transfer programs. RESULTS: Of 2407 children <2 y of age, about 48% reported being beneficiaries of maternal and immunization-based conditional cash transfers. Beneficiary status was associated with an increased use of public services (adjusted relative risk [aRR] 3.14 [95% confidence interval {CI} 1.96 - 5.02]) but not the use of private services (aRR 1.42 [95% CI 0.97 - 2.08]) relative to home or informal care. CONCLUSIONS: Our findings indicate financial incentives for use of maternal and immunization services could have an indirect, non-targeted effect on utilization of formal healthcare for acute childhood illnesses.</p>	INT	JUL TO DEC	Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences	PMID: 31867626 PMC:7322194
611.	<p>Srinivasaraghavan, R. and Oommen, S. P. Developmental Delay with Intermittent Twisting of Neck Indian Pediatr; 2020, 57 (5): 469-470 Address: Developmental Pediatrics unit, Christian Medical College and Hospital, Vellore, India. Developmental Pediatrics unit, Christian Medical College and Hospital, Vellore, India. docspo@gmail.com</p>	NAT	JAN TO JUN	Developmental Pediatrics unit, Pediatrics unit	PMID:32444522 WOS:000534795300020 SCOPUS H-INDEX:49 IF: 1.163 BIOXBIO (2018/2019)
612.	<p>Srivastava, A. Diagnosis of haemophilia and other inherited bleeding disorders - Is a new paradigm needed? Haemophilia; 2020, Address: Department of Haematology, Christian Medical College, Vellore, India. The current paradigm for the diagnosis of haemophilia and other inherited bleeding disorders (IBDs) based on clinical assessment followed by screening tests and confirmation by assays of clotting factor levels or platelet functions is complex and cumbersome. These have been difficult to establish and standardize around the world for many reasons. Therefore, more than half of the expected number of</p>	INT	JAN TO JUN	Haematology	PMID:32537805 SCOPUS H-INDEX:88 IF: 3.590 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	people with these disorders in the world remain unidentified. A new approach is therefore needed. Use of validated bleeding assessment tools (BATs) offers an opportunity for standardized evaluation of clinically significant bleeding at the primary care level or even to be self-assessed. Advances in genetic evaluation of these disorders through gene panels covering a wide range of IBDs based on next generation sequencing (NGS) technology enable the identification of the primary defect in the haemostasis system with high degree of accuracy. These methods can be centralized and made highly cost-effective when done in large batches. The combination of high BAT score followed by NGS-based genetic diagnosis could be the new paradigm for the primary diagnosis of IBDs. This will need to be followed by confirmation with functional haemostasis tests, as required. This approach will increase rates of detection of the known common disorders many folds and reduce the burden on these families towards accessing facilities for accurate diagnosis and appropriate treatment based on that.				
613.	<p>Srivastava, A., Agarwal, G., Jatoi, I., Chintamani, Sarkar, D., Paul, M. J., Haresh, K. P. and Lohani, K. R. Asian Society of Mastology (ASOMA)-Proposed Standards for Care of Breast Cancer Patients Indian Journal of Surgery; 5</p> <p>Address: [Srivastava, Anurag; Haresh, Kunhi Parambath; Lohani, Kush Raj] All India Inst Med Sci, New Delhi, India. [Agarwal, Gaurav] Sanjay Gandhi Post Grad Inst Med Sci, Lucknow, Uttar Pradesh, India. [Jatoi, Ismail] Univ Texas Hlth Sci Ctr San Antonio, San Antonio, TX 78229 USA. [Chintamani] Vardhman Mahavir Med Coll, New Delhi, India. [Chintamani] Safdarjang Hosp, New Delhi, India. [Sarkar, Diptendra] Inst Postgrad Med Educ & Res, Kolkata, India. [Sarkar, Diptendra] Seth Sukhlal Karnani Mem Hosp, Kolkata, India. [Paul, Mazhuvanchary Jacob] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. Srivastava, A (reprint author), All India Inst Med Sci, New Delhi, India. dr.anuragsrivastava@gmail.com</p> <p>The Asian Society of Mastology (ASOMA) was established with an attempt to bring together experts in the field of breast surgery, radiation oncology, medical oncology, radiology, pathology, and breast care nursing to update and improve care for the patients with various breast diseases in developing countries. The ASOMA-proposed "Standards of Care for Breast Cancer Patients" has been developed with an attempt to identify obstacles and provide possible solutions to improve quality of care for breast cancer patients. Besides these recommendations for cancer care, issues related to common benign breast diseases, viz. non-lactation mastitis, granulomatous mastitis, high-risk lesions, and issues related to triple assessment, were also deliberated.</p>	NAT	JAN TO JUN	Endocrine Surgery	<p>WOS:000530962400001 SCOPUS H-INDEX:19 IF: 0.550 BIOXBIO (2018/2019)</p>
614.	<p>Srivastava, A., Santagostino, E., Dougall, A., Kitchen, S., Sutherland, M., Pipe, S. W., Carcao, M., Mahlangu, J., Ragni, M. V., Windyga, J., Llinás, A., Goddard, N. J., Mohan, R., Poonnoose, P. M., Feldman, B. M., Lewis, S. Z., Van Den Berg, H. M. and Pierce, G.</p>	INT	JUL TO DEC	Haematology, Orthopaedics	<p>PMID:32744769 PMC 6895</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>F. WFH Guidelines for the Management of Hemophilia, 3rd edition Haemophilia; 2020, 26 Suppl 6 1-158</p> <p>Address: Department of Haematology, Christian Medical College, Vellore, India. A. Bianchi Bonomi Hemophilia and Thrombosis Centre, IRCCS Cà Granda Foundation, Maggiore Hospital Policlinico, Milan, Italy, and Sobi, Basel, Switzerland. Special Care Dentistry Division of Child and Public Dental Health, School of Dental Science, Trinity College Dublin, Dublin Dental University Hospital, Dublin, Ireland. Department of Coagulation, Sheffield Haemophilia and Thrombosis Centre, Sheffield Teaching Hospitals NHS Foundation Trust, Sheffield, UK. Manchester University Hospitals NHS Foundation Trust, Manchester, UK. Departments of Pediatrics and Pathology, University of Michigan, Ann Arbor, Michigan, USA. Department of Paediatrics, University of Toronto, Division of Haematology/Oncology, Hospital for Sick Children, Toronto, ON, Canada. Department of Molecular Medicine and Haematology, University of the Witwatersrand, National Health Laboratory Service, Johannesburg, South Africa. Division of Hematology/Oncology, Department of Medicine, University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania, USA. Department of Hemostasis Disorders and Internal Medicine, Laboratory of Hemostasis and Metabolic Diseases, Institute of Hematology and Transfusion Medicine, Warsaw, Poland. Fundacion Santa Fe de Bogota, and Universidad de los Andes, Bogota, Columbia. Department of Trauma and Orthopaedics, Royal Free Hospital, London, UK. Empowering Minds Society for Research and Development, New Delhi, India. Department of Orthopaedics, Christian Medical College, Vellore, India. Division of Rheumatology, Department of Paediatrics, University of Toronto, Hospital for Sick Children, Toronto,, ON, Canada. EBQ Consulting, LLC, Northbrook, Illinois, USA. PedNet Haemophilia Research Foundation, Baarn, the Netherlands. World Federation of Hemophilia, Montreal,, QC, Canada.</p>				
615.	<p>Street, A., Dunkley, S., Ibrahim, H., John, M. J., Lam, J., Nair, S. C., Shima, M., Tran, H., Wong, R., Yang, R. C. and Srivastava, A. Asia Pacific Hemophilia Working Group Its role in enhancing haemophilia care Haemophilia; 2020, 26 113-114</p> <p>Address: [Street, Alison] Monash Univ, Melbourne, Vic, Australia. [Dunkley, Scott] Royal Prince Alfred Hosp, Sydney, NSW, Australia. [Ibrahim, Hishamshah] Womens & Childrens Hosp, Kuala Lumpur, Malaysia. [John, M. Joseph] Christian Med Coll & Hosp, Ludhiana, Punjab, India. [Lam, Joyce] KK Womens & Childrens Hosp, Singapore, Singapore. [Nair, Sukesh C.; Srivastava, Alok] Christian Med Coll &</p>	INT	JAN TO JUN	Clinical Haematology	<p>WOS:000536674800206 H-INDEX:88 IF: 3.590 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Hosp, Vellore , Tamil Nadu, India. [Shima, Midori] Nara Med Univ, Kashihara, Nara, Japan. [Huyen Tran] Alfred Hosp Melbourne, Melbourne, Vic, Australia. [Wong, Raymond] Chinese Univ Hong Kong, Prince Wales Hosp, Hong Kong, Peoples R China. [Yang, Renchi] Chinese Acad Med Sci, Tianjin, Peoples R China. [Yang, Renchi] Peking Union Med Coll, Tianjin, Peoples R China.				
616.	Subramanian, A., Nair, B. R. and Rajshekhar, V. Functional Outcomes and Temporal Profile of Recovery in Patients with Intradural Extramedullary Spinal Cord Tumors with Poor Nurick Grade World Neurosurg; 2020, Address: Department of Neurological Sciences, Christian Medical College, Vellore, India. Department of Neurological Sciences, Christian Medical College, Vellore, India. Electronic Address: drbijeshr@cmcvellore.ac.in. BACKGROUND: Patients with spinal intradural extramedullary (IDEM) tumors usually have a good functional outcome after tumor excision. However, the literature is sparse on the functional outcome in patients with poor Nurick grade (NG 4 and 5). METHODS: A retrospective review of 81 patients with IDEM tumors presenting with a poor NG was performed to determine postoperative functional outcome and the temporal pattern of recovery. The following risk factors were analyzed: preoperative NG, duration of symptoms, tumor location, peritumoral edema, presence of syrinx, and tumor type. RESULTS: Neurologic function started recovering soon after surgery, with >80% of the patients improving by ≥ 1 grade at the end of 1 week after surgery. Of the 66 patients available for follow-up of >6 months after surgery, 63 (95.5%) improved to NG 0-2 and 51 (77.2%) became asymptomatic (NG 0 or 1). Three patients had a poor functional outcome on follow-up of >31 months; 2 had improved from NG 5 to NG 4, whereas 1 patient continued to be in NG 4. Factors associated with a poor outcome were an upper thoracic location (P = 0.025) and presence of a syrinx (P = 0.004). None of the patients had bladder dysfunction at follow-up of >6 months. CONCLUSIONS: After excision of spinal IDEM tumors, in patients who present with a poor neurologic function (NG 4 and 5), good functional outcome (NG 0-2) can be expected in >95% of patients. No recovery can be anticipated beyond 1 year after surgery.	INT	JUL TO DEC	Neurological Sciences	PMID: 33171318
617.	Subramanian, S., Jonathan, G. E., Patel, B. and Prabhu, K. Synovial sarcoma mimicking a thoracic dumbbell schwannoma- a case report* British Journal of Neurosurgery; 2020, 34 (1): 98-101 Address: [Subramanian, Susanth; Jonathan, Gandham Edmond; Prabhu, Krishna] Christian Med Coll & Hosp , Dept Neurol Sciences, Vellore, India. [Patel, Bimal] Christian Med Coll & Hosp , Dept Neuropathol, Vellore, India. [Prabhu, Krishna] Christian Med Coll & Hosp , Dept Neurol Sciences, CONTACT Krishna Prabhu, Vellore, India. Prabhu, K (reprint author), Christian Med Coll & Hosp , Dept Neurol Sciences, Vellore, India. ; Prabhu, K (reprint author), Christian Med Coll & Hosp , Dept Neurol Sciences, CONTACT Krishna Prabhu, Vellore, India.	INT	JAN TO JUN	Neurological Sciences, Neuropathology	WOS:000518237500025 SCOPUS H-INDEX:62 IF: 1.481 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>krishnaprabhu@cmcvellore.ac.in</p> <p>Introduction: Synovial sarcoma is a rare mesenchymal malignant neoplasm that accounts for less than 10% of soft tissue sarcomas. About 95% of the sarcomas occur in the extremities. Primary synovial sarcomas of the spine are a rare tumor arising from the paravertebral regions, paraspinous muscles or epidural spaces. Purpose: To report an atypical radiological presentation of synovial sarcoma of the thoracic spine mimicking a nerve sheath tumor in an elderly adult and describe the management with review of the literature. Clinical presentation: A forty-six-year-old lady presented with clinical features of a thoracic intradural extramedullary cord compression at T7 level. She was Nurick grade 4 at presentation. MRI of the Thoracic spine with whole spine screening showed a contrast enhancing intradural extramedullary tumor at the T7-8 level; the tumor was exiting out through the left T7-8 neural foramina with foraminal widening. The possibility of a schwannoma was considered. Intervention: She underwent a T7-8 laminectomy and total excision of the tumor followed by posterior fusion. The biopsy was reported as synovial sarcoma. She subsequently underwent radiation and chemotherapy. She had marked improvement in her Neurological status and remained disease free at six months follow-up. Conclusion: Synovial sarcoma of the spine is a rare mesenchymal malignant neoplasm. One needs to consider Synovial sarcoma as one of the differential diagnosis of intradural tumors of the spine.</p>				
618.	<p>Sudrania, M., Valson, A., Dangi, A. and Kekre, N. Chyluria with massive proteinuria: Do not reach for the biopsy gun! Saudi Journal of Kidney Diseases and Transplantation; 2020, 31 (6): 1407-1410 Address: Department of Urology, Christian Medical College, Vellore, Tamil Nadu, India Department of Nephrology, Christian Medical College, Vellore, Tamil Nadu, India We report on a patient presenting with persistent chyluria due to filariasis, whose clinical course was complicated by massive proteinuria and severe hypoalbuminemia. Treatment with dietary manipulation, antifilarials, and sclerotherapy resulted in successful reversal of the above abnormalities. It has been reported that chyluria is not associated with massive proteinuria, or that even in cases of massive proteinuria, hypoalbuminemia is not seen and implies a glomerular pathology. We argue that chyluria is always associated with proteinuria, which may be massive, and does not warrant a kidney biopsy unless proteinuria persists despite resolution of chyluria. © 2020 Saudi Center for Organ Transplantation. All rights reserved.</p>	INT	JUL TO DEC	Urology, Nephrology	SCOPUS
619.	<p>Sugumar, D., Arockiaraj, J., Amritanand, R., David, K. S. and Krishnan, V. Role of Biochemical Nutritional Parameters as Predictors of Postoperative Morbidity in Major Spine Surgeries Asian Spine J; 2020, Address: Spinal Disorders Surgery Unit, Department of Orthopaedics, Christian Medical College, Vellore, India. STUDY DESIGN: Prospective cohort study. PURPOSE: To evaluate the association</p>	INT	JUL TO DEC	Spinal Disorders Surgery Unit, Orthopaedics	PMID: 33059432

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>between nutritional parameters related to postoperative surgical site infections and duration of hospital stay and intensive care unit (ICU) stay in patients undergoing major spine surgery. OVERVIEW OF LITERATURE: Malnutrition is highly prevalent in surgical patients. Malnourished patients are considered to be at higher risk for postoperative morbidity and mortality due to impaired wound healing, delayed inflammation, impaired fibroblast proliferation, and collagen synthesis. Decreased lymphocyte count also impairs the ability of the immune system to eradicate or prevent infection, which predisposes these patients to infections. However, this association between malnutrition and postoperative morbidity is not consistent across studies, thus necessitating further investigation. METHODS: The values of serum albumin, prealbumin, total lymphocyte counts, and transferrin were documented preoperatively and postoperatively on day 5 for all patients undergoing major spine surgery (surgery involving instrumentation of at least three motion segments). In addition, patients' surgical wound healing status, duration of hospital stay, and duration of ICU stay in the postoperative period were documented. Finally, the statistical correlation between the nutritional markers and these complications was determined. RESULTS: Low postoperative prealbumin levels was significantly associated with increased complication rates. ICU stay demonstrated a statistically significant association with low postoperative albumin, prealbumin, and transferrin levels. Similarly, we observed that low postoperative albumin and prealbumin levels could significantly predict the need for prolonged hospital stay in patients undergoing major spine surgery. CONCLUSIONS: The magnitude of the decrease in nutritional status due to surgery with respect to albumin and prealbumin levels is a significant ($p < 0.05$) predictor of wound-related complications, rather than a single nutritional parameter evaluated at a point of time.</p>				
620.	<p>Sunil, V. N., John, K., Nawahirsha, S. and Iyyadurai, R. Micturition syncope: a rare presentation of bladder paraganglioma BMJ case reports; 2020, 13 (9): Address: Internal Medicine, Christian Medical College, Vellore, Tamil Nadu, India neethusunilv@gmail.com. Internal Medicine, Christian Medical College, Vellore, Tamil Nadu, India. A 68-year-old woman presented with episodes of headache, palpitations, sweating and poorly controlled hypertension for the past 6 years. These symptoms were, at times, associated with micturition, and there were few episodes of micturition syncope as well. She had elevated 24-hour urinary normetanephrine and was found to have a paraganglioma arising from the urinary bladder infiltrating the sigmoid colon. She underwent laparotomy with excision of the bladder paraganglioma, following which her symptoms subsided. Paragangliomas are extra-adrenal catecholamine-producing tumours. Bladder paragangliomas need to be considered when evaluating hypertensive patients with headache, palpitations or syncope related to micturition.</p>	INT	JUL TO DEC	Internal Medicine	PMID: 32878856 PMC:7470636
621.	<p>Sunkara, S. K., Antonisamy, B., Redla, A. C. and Kamath, M. S. Female causes of infertility are associated with higher risk of preterm birth and low</p>	INT	JUL TO DEC	Reproductive Medicine	PMID: 33367914

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>birth weight: analysis of 117 401 singleton live births following IVF Hum Reprod; 2020, Address: Division of Women's Health, Faculty of Life Sciences and Medicine, King's College London, London, UK. Department of Reproductive Medicine, Christian Medical College, Vellore, India. Faculty of Life Sciences and Medicine, King's College London, London, UK.</p> <p>STUDY QUESTION: Does the cause of infertility affect the perinatal outcomes preterm birth (PTB) and low birth weight (LBW) following IVF treatment? SUMMARY ANSWER: The risk of PTB and LBW was higher with female causes of infertility-ovulatory disorders, tubal disorders and endometriosis-compared to unexplained infertility but the absolute increase in risk was low. WHAT IS KNOWN ALREADY: Infertility is associated with an increased risk of adverse perinatal outcomes. Risk of adverse perinatal outcomes is also higher following ART compared to spontaneous conceptions. Infertility can result from female and/or male factors or is unexplained when the cause cannot be delineated by standard investigations. Given that infertility and ART are contributory to the adverse perinatal outcomes, it is a matter of interest to delineate if the specific cause of infertility influences perinatal outcomes following IVF treatment. STUDY DESIGN, SIZE, DURATION: Anonymous data were obtained from the Human Fertilization and Embryology Authority (HFEA). The HFEA has collected data prospectively on all ART cycles performed in the UK since 1991. Data from 1991 to 2016 comprising a total of 117 401 singleton live births following IVF with or without ICSI (IVF ± ICSI) for sole causes of infertility were analysed for PTB and LBW. Cycles having more than one cause of infertility and/or multiple births were excluded. PARTICIPANTS/MATERIALS, SETTING, METHODS: Data on all women undergoing stimulated IVF ± ICSI treatment cycles were analysed to compare perinatal outcomes of PTB and LBW among singleton live births based on the cause of infertility (ovulatory disorders, tubal disorders, endometriosis, male factor, unexplained). Logistic regression analysis was performed, adjusting for female age category, period of treatment, previous live births, IVF or ICSI, number of embryos transferred and fresh or frozen embryo transfer cycles. MAIN RESULTS AND THE ROLE OF CHANCE: Compared to unexplained infertility, the risk of PTB was significantly higher with ovulatory disorders (adjusted odds ratio (aOR) 1.31, 99.5% CI 1.17 to 1.46); tubal disorders (aOR 1.25, 99.5% CI 1.14 to 1.38) and endometriosis (aOR 1.17, 99.5% CI 1.01 to 1.35). There was no significant difference in the risk of PTB with male factor causes compared to unexplained infertility (aOR 1.01, 99.5% CI 0.93, 1.10). The risk of LBW was significantly higher with ovulatory disorders (aOR 1.29, 99.5% CI 1.16 to 1.44) and tubal disorders (aOR 1.12, 99.5% CI 1.02 to 1.23) and there was no increase in the risk of LBW with endometriosis (aOR 1.11, 99.5% CI 0.96 to 1.30) and male factor causes (aOR 0.94, 99.5% CI 0.87, 1.03), compared to unexplained infertility. LIMITATIONS, REASONS FOR CAUTION: Although the analysis was adjusted for several important confounders, there was no information on the medical history of women during pregnancy to allow adjustment. The limitations with observational data would apply to this study, including residual confounding. WIDER IMPLICATIONS OF THE</p>				

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	FINDINGS: This is the largest study to address the causes of infertility affecting perinatal outcomes of PTB and LBW. The information is important for the management of pregnancies and the underlying reasons for the associations observed need to be further understood. STUDY FUNDING/COMPETING INTEREST(S): No funding was obtained. There are no competing interests to declare. TRIAL REGISTRATION NUMBER: N/A.				
622.	<p>Sunkara, S. K., Ramaraju, G. A. and Kamath, M. S. Management Strategies for POSEIDON Group 2 Front Endocrinol (Lausanne); 2020, 11 105</p> <p>Address: Division of Women's Health, Faculty of Life Sciences and Medicine, King's College London, London, United Kingdom. Center for Assisted Reproduction, Krishna IVF Clinic, Visakhapatnam, India. Department of Reproductive Medicine, Christian Medical College, Vellore, India.</p> <p>Although individualization of ovarian stimulation aims at maximal efficacy and safety in assisted reproductive treatments, in its current form it is far from ideal in achieving the desired success in women with a low prognosis. This could be due a failure to identify such women who are likely to have a low prognosis with currently used prognostic characteristics. Introduction of the patient-oriented strategies encompassing individualized oocyte number (POSEIDON) concept reinforces recognizing such low prognosis groups and stratifying in accordance with important prognostic factors. The POSEIDON concept provides a practical approach to the management of these women and is a useful tool for both counseling and clinical management. In this commentary, we focus on likely management strategies for POSEIDON group 2 criteria.</p>	INT	JAN TO JUN	Reproductive Medicine Unit	<p>PMID:32174892 PMC ID: PMC7056824 WOS:000525264300001 SCOPUS H-INDEX:59 IF: 3.630 BIOXBIO (2018/2019)</p>
623.	<p>Sunny, S. S., Hephzibah, J., Shanthly, N., Oommen, R., Mathew, D. and Abraham, A. Yttrium-90 Synovectomy in Hemophilic Arthropathy: An Institutional Experience for 15 Years Indian J Nucl Med; 2020, 35 (2): 143-146</p> <p>Address: Department of Nuclear Medicine, Christian Medical College, Vellore, Tamil Nadu, India. Department of Haematology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>OBJECTIVE: The objective of this study is to assess the efficacy of Yttrium-90 (Y-90) radiation synovectomy in decreasing the recurrent bleeding episodes in hemophilic joints. SUBJECTS AND METHODS: A retrospective analysis of patients who had Y-90 synovectomy from January 2001 to January 2016 was done. Among them, patients with minimum follow-up of 6 months were selected. The response in terms of decrease in the number of bleeding episodes was evaluated. RESULTS: A total of 167 patients (243 joints) with hemophilia had radiation synovectomy</p>	NAT	JAN TO JUN	Nuclear Medicine, Clinical Haematology	<p>PMID:32351269 PMC ID: PMC7182316 SCOPUS H-INDEX:11 IF: 0.160 RESEARCHGATE (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	over 15 years. Those with a minimum follow-up of 6 months were 155 joints (115 patients). The age ranged from 5 to 43 years and included 113 male and two female patients. Data for 11 joints were unavailable as these patients were lost to follow-up. The assessment of response for the remaining 144 joints was done based on the data available for different follow-up periods. They were divided into the following - 7 months to 2 years (89 joints), 3-5 years (6 joints), 6-10 years (39 joints), and above 11 years (10 joints). Overall, 37.4% of the joints had complete response, 56% had partial response, and 6% of the joints had no response. CONCLUSION: Radiation synovectomy is a noninvasive and effective modality which decreases the bleeding episodes in hemophiliac joints and improves the quality of life remarkably.				
624.	<p>Swaminathan, G., Muralidharan, V., Devakumar, D. and Joseph, B. V. Accuracy of the freehand (fennell) technique using a uniform entry point and sagittal trajectory for insertion of thoracic pedicle screws: A computed tomography-based virtual simulation study Neurol India; 2020, 68 (2): 468-471</p> <p>Address: Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, India. Department of Nuclear Medicine, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>BACKGROUND: Thoracic spine has complex pedicle anatomy with a narrow canal diameter which makes pedicle screw insertion challenging. Fennell et al. have described a simple freehand technique of thoracic pedicle screw placement. We have tested the accuracy of Fennell technique using computed tomography-based (CT-based) simulation model with pedicle screw simulator (PSS). METHODS: Normal CT thoracic spine obtained from CT thorax data of five patients were used in the 3D slicer environment using PSS for simulation. Entry points and axial trajectory as described by Fennell et al. and a sagittal trajectory parallel to the superior endplate were used for simulating the freehand technique using EA (entry angle) mode in the PSS. An ideal trajectory through the midsection of the pedicle from the same entry point and a sagittal trajectory parallel to the superior endplate were simulated using the ET (Entry Target) mode. Angle predicted by the software for an ideal axial trajectory was compared with the Fennell technique and this angle difference was noted at all the levels. Presence of pedicle breach was noted while simulating the Fennell technique. RESULTS: A total of 240 thoracic pedicle screw insertions were simulated, 120 screws by each technique. A sagittal trajectory parallel to the superior endplate caused no pedicle breach in the cranial-caudal direction at any level. No medial or lateral breach was noted while using an axial trajectory of 30° at T1-T2 and 20° from T3-T10. A 20° axial trajectory at T11 and T12 resulted in a breach of the medial cortex and the ideal mean axial angles at T11 and T12 were 2.8° and 6.5°, respectively. CONCLUSIONS: Fennell technique was</p>	NAT	JAN TO JUN	Neurological Sciences, Nuclear Medicine	<p>PMID:32415026 SCOPUS H-INDEX:45 IF: 2.708 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	effectively simulated using PSS. A uniform entry point and sagittal trajectory parallel to the superior endplate serves as a useful guide for freehand insertion of thoracic pedicle screws. At T11 and 12, ideal axial trajectories are less than 10°.				
625.	Taddei, C., Zhou, B., Bixby, H., Carrillo-Larco, R. M., Danaei, G., Jackson, R. T., Farzadfar, F., Sophiea, M. K., Di Cesare, M., Iurilli, M. L. C., Martinez, A. R., Asghari, G., Dhana, K., Gulayin, P., Kakarmath, S., Santero, M., Voortman, T., Riley, L. M., Cowan, M. J., Savin, S., Bennett, J. E., Stevens, G. A., Paciorek, C. J., Aekplakorn, W., Cifkova, R., Giampaoli, S., Kengne, A. P., Khang, Y. H., Kuulasmaa, K., Laxmaiah, A., Margozzini, P., Mathur, P., Nordestgaard, B. G., Zhao, D., Aadahl, M., Abarca-Gómez, L., Rahim, H. A., Abu-Rmeileh, N. M., Acosta-Cazares, B., Adams, R. J., Agdeppa, I. A., Aghazadeh-Attari, J., Aguilar-Salinas, C. A., Agyemang, C., Ahluwalia, T. S., Ahmad, N. A., Ahmadi, A., Ahmadi, N., Ahmed, S. H., Ahrens, W., Ajlouni, K., Alarouj, M., Albuhairan, F., Aldhukair, S., Ali, M. M., Alkandari, A., Alkerwi, A., Aly, E., Amarapurkar, D. N., Amouyel, P., Andersen, L. B., Anderssen, S. A., Anjana, R. M., Ansari-Moghaddam, A., Aounallah-Skhiri, H., Araújo, J., Ariansen, I., Aris, T., Arku, R. E., Arlappa, N., Aryal, K. K., Aspelund, T., Assunção, M. C. F., Auvinen, J., Avdicová, M., Azevedo, A., Azizi, F., Azmin, M., Balakrishna, N., Bamoshmoosh, M., Banach, M., Bandosz, P., Banegas, J. R., Barbagallo, C. M., Barceló, A., Barkat, A., Bata, I., Batieha, A. M., Batyrbek, A., Baur, L. A., Beaglehole, R., Belavendra, A., Ben Romdhane, H., Benet, M., Benn, M., Berkinbayev, S., Bernabe-Ortiz, A., Bernotiene, G., Bettiol, H., Bhargava, S. K., Bi, Y., Bienek, A., Bikbov, M., Bista, B., Bjerregaard, P., Bjertness, E., Bjertness, M. B., Björkelund, C., Bloch, K. V., Blokstra, A., Bo, S., Boehm, B. O., Boggia, J. G., Boissonnet, C. P., Bonaccio, M., Bongard, V., Borchini, R., Borghs, H., Bovet, P., Brajkovich, I., Breckenkamp, J., Brenner, H., Brewster, L. M., Bruno, G., Bugge, A., Busch, M. A., De León, A. C., Cacciottolo, J., Can, G., Cândido, A. P. C., Capanzana, M. V., Capuano, E., Capuano, V., Cardoso, V. C., Carvalho, J., Casanueva, F. F., Censi, L., Chadjigeorgiou, C. A., Chamukuttan, S., Chaturvedi, N., Chen, C. J., Chen, F., Chen, S., Cheng, C. Y., Cheraghian, B., Chetrit, A., Chiou, S. T., Chirlaque, M. D., Cho, B., Cho, Y., Chudek, J., Claessens, F., Clarke, J., Clays, E., Concin, H., Confortin, S. C., Cooper, C., Costanzo, S., Cottel, D., Cowell, C., Crujeiras, A. B., Csilla, S., Cui, L., Cureau, F. V., D'arrigo, G., D'orsi, E., Dallongeville, J., Damasceno, A., Dankner, R., Dantoft, T. M., Dauchet, L., Davletov, K., De Backer, G., De Bacquer, D., De Gaetano, G., De Henauw, S., De Oliveira, P. D., De Ridder, D., De Smedt, D., Deepa, M., Deev, A. D., Dehghan, A., Delisle, H., Dennison, E., Deschamps, V., Dhimal, M., Di Castelnuovo, A. F., Dika, Z., Djalalinia, S., Dobson, A. J., Donfrancesco, C., Donoso, S. P., Döring, A., Dorobantu, M., Dragano, N., Drygas, W., Du, Y., Duante, C. A., Duda, R. B., Dzerve, V., Dziankowska-Zaborszczyk, E., Eddie, R., Eftekhar, E., Eggertsen, R., Eghtesad, S., Eiben, G., Ekelund, U., El Ati, J., Eldemire-Shearer, D., Eliassen, M., Elosua, R., Erasmus, R. T., Erbel, R., Erem, C., Eriksen, L., Eriksson, J. G., Escobedo-De La Peña, J., Eslami, S., Esmaeili, A., Evans, A., Faeh, D., Fall, C. H., Faramarzi, E., Farjam, M., Fattahi, M. R., Felix-Redondo, F. J., Ferguson, T. S., Fernández-Bergés, D., Ferrante, D., Ferrari, M., Ferreccio, C., Ferrieres, J., Föger, B., Foo, L. H., Forslund, A. S., Forsner, M., Fouad, H. M., Francis, D. K., Do Carmo Franco, M., Franco, O. H., Frontera, G., Fujita, Y., Fumihiko, M., Furusawa, T., Gaciong,	INT	JAN TO JUN	Biostatistics	SCOPUS H-INDEX:1159 IF: 43.070 BIOXBIO (2018/2019)

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	Z., Galvano, F., Gao, J., Garcia-De-La-Hera, M., Garnett, S. P., Gaspoz, J. M., Gasull, M., Gazzinelli, A., Geleijnse, J. M., Ghanbari, A., Ghasemi, E., Gheorghe-Fronea, O. F., Ghimire, A., Gianfagna, F., Gill, T. K., Giovannelli, J., Gironella, G., Giwercman, A., Goltzman, D., Gonçalves, H., Gonzalez-Chica, D. A., Gonzalez-Gross, M., González-Rivas, J. P., González-Villalpando, C., González-Villalpando, M. E., Gonzalez, A. R., Gottrand, F., Graff-Iversen, S., Grafnetter, D., Gregor, R. D., Grodzicki, T., Grøntved, A., Grosso, G., Gruden, G., Gu, D., Guallar-Castillón, P., Guan, O. P., Gudmundsson, E. F., Gudnason, V., Guerrero, R., Guessous, I., Gunnlaugsdottir, J., Gupta, R., Gutierrez, L., Gutzwiller, F., Ha, S., Hadaegh, F., Haghshenas, R., Hakimi, H., Hambleton, I. R., Hamzeh, B., Hantunen, S., Kumar, R. H., Hashemi-Shahri, S. M., Hata, J., Haugsgjerd, T., Hayes, A. J., He, J., He, Y., Hendriks, M. E., Henriques, A., Herrala, S., Heshmat, R., Hill, A. G., Ho, S. Y., Ho, S. C., Hobbs, M., Hofman, A., Homayounfar, R., Hopman, W. M., Horimoto, A. R. V. R., Hormiga, C. M., Horta, B. L., Houti, L., Howitt, C., Htay, T. T., Htet, A. S., Htike, M. M. T., Huerta, J. M., Huhtaniemi, I. T., Huisman, M., Hunsberger, M. L., Hussein, A. S., Huybrechts, I., Hwalla, N., Iacoviello, L., Iannone, A. G., Ibrahim, M. M., Wong, N. I., Iglesia, I., Ikeda, N., Ikram, M. A., Iotova, V., Irazola, V. E., Ishida, T., Islam, M., Al-Safi Ismail, A., Iwasaki, M., Jacobs, J. M., Jaddou, H. Y., Jafar, T., James, K., Jamrozik, K., Janszky, I., Janus, E., Jarvelin, M. R., Jasienska, G., Jelakovic, A., Jelakovic, B., Jennings, G., Jensen, G. B., Jeong, S. L., Jha, A. K., Jiang, C. Q., Jimenez, R. O., Jöckel, K. H., Joffres, M., Jokelainen, J. J., Jonas, J. B., Jørgensen, T., Joshi, P., Joukar, F., Józwiak, J., Juolevi, A., Kafatos, A., Kajantie, E. O., Kalter-Leibovici, O., Kamaruddin, N. A., Kamstrup, P. R., Karki, K. B., Katz, J., Kauhanen, J., Kaur, P., Kavousi, M., Kazakbaeva, G., Keil, U., Keinänen-Kiukaanniemi, S., Kelishadi, R., Keramati, M., Kerimkulova, A., Kersting, M., Khader, Y. S., Khalili, D., Khateeb, M., Kheradmand, M., Khosravi, A., Kiechl-Kohlendorfer, U., Kiechl, S., Killewo, J., Kim, H. C., Kim, J., Kim, Y. Y., Klumbiene, J., Knoflach, M., Ko, S., Kohler, H. P., Kohler, I. V., Kolle, E., Kolsteren, P., König, J., Korpelainen, R., Korrovits, P., Kos, J., Koskinen, S., Kouda, K., Kowlessur, S., Kratzer, W., Kriemler, S., Kristensen, P. L., Krokstad, S., Kromhout, D., Kujala, U. M., Kurjata, P., Kyobutungi, C., Laamiri, F. Z., Laatikainen, T., Lachat, C., Laid, Y., Lam, T. H., Lambrinou, C. P., Lanska, V., Lappas, G., Larijani, B., Latt, T. S., Laugsand, L. E., Lazo-Porras, M., Lee, J., Lee, J., Lehmann, N., Lehtimäki, T., Levitt, N. S., Li, Y., Lilly, C. L., Lim, W. Y., Lima-Costa, M. F., Lin, H. H., Lin, X., Lin, Y. T., Lind, L., Linneberg, A., Lissner, L., Liu, J., Loit, H. M., Lopez-Garcia, E., Lopez, T., Lotufo, P. A., Lozano, J. E., Luksiene, D., Lundqvist, A., Lundqvist, R., Lunet, N., Ma, G., Machado-Coelho, G. L. L., Machado-Rodrigues, A. M., Machi, S., Madar, A. A., Maggi, S., Magliano, D. J., Magriplis, E., Mahasampath, G., Maire, B., Makdisse, M., Malekzadeh, F., Malekzadeh, R., Rao, K. M., Manios, Y., Mann, J. I., Mansour-Ghanaei, F., Manzato, E., Marques-Vidal, P., Martorell, R., Mascarenhas, L. P., Mathiesen, E. B., Matsha, T. E., Mavrogianni, C., Mcfarlane, S. R., Mcgarvey, S. T., Mclachlan, S., Mclean, R. M., Mclean, S. B., McNulty, B. A., Mediene-Benchekor, S., Mehdipour, P., Mehlig, K., Mehrparvar, A. H., Meirhaeghe, A., Meisinger, C., Menezes, A. M. B., Menon, G. R., Merat, S., Mereke, A., Meshram, I. I., Metcalf, P., Meyer, H. E., Mi, J., Michels, N., Miller, J. C., Minderico, C. S., Mini, G. K., Miquel, J. F., Miranda, J. J., Mirjalili, M. R., Mirrakhimov, E., Modesti, P. A., Moghaddam, S. S., Mohajer, B., Mohamed, M. K.,				

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	<p>Mohammad, K., Mohammadi, Z., Mohammadifard, N., Mohammadpourhodki, R., Mohan, V., Mohanna, S., Yusoff, M. F. M., Mohebbi, I., Mohebi, F., Moitry, M., Møllehave, L. T., Møller, N. C., Molnár, D., Momenan, A., Mondo, C. K., Monterrubio-Flores, E., Moosazadeh, M., Morejon, A., Moreno, L. A., Morgan, K., Morin, S. N., Moschonis, G., Mossakowska, M., Mostafa, A., Mota, J., Motlagh, M. E., Motta, J., Msyamboza, K. P., Muiesan, M. L., Müller-Nurasyid, M., Mursu, J., Mustafa, N., Nabipour, I., Naderimagham, S., Nagel, G., Naidu, B. M., Najafi, F., Nakamura, H., Námešná, J., Nang, E. E. K., Nangia, V. B., Nauck, M., Neal, W. A., Nejatizadeh, A., Nenko, I., Nervi, F., Nguyen, N. D., Nguyen, Q. N., Nieto-Martínez, R. E., Nihal, T., Niiranen, T. J., Ning, G., Ninomiya, T., Noale, M., Noboa, O. A., Noto, D., Nsour, M. A., Nuhoğlu, I., O'Neill, T. W., O'Reilly, D., Ochoa-Avilés, A. M., Oh, K., Ohtsuka, R., Olafsson, Ö, Olié, V., Oliveira, I. O., Omar, M. A., Onat, A., Ong, S. K., Ordunez, P., Ornelas, R., Ortiz, P. J., Osmond, C., Ostojic, S. M., Ostovar, A., Otero, J. A., Owusu-Dabo, E., Paccaud, F. M., Pahomova, E., Pajak, A., Palmieri, L., Pan, W. H., Panda-Jonas, S., Panza, F., Parnell, W. R., Patel, N. D., Peer, N., Peixoto, S. V., Peltonen, M., Pereira, A. C., Peters, A., Petersmann, A., Petkeviciene, J., Peykari, N., Pham, S. T., Pichardo, R. N., Pigeot, I., Pilav, A., Pilotto, L., Piwonska, A., Pizarro, A. N., Plans-Rubió, P., Plata, S., Pohlbeln, H., Porta, M., Portegies, M. L. P., Poudyal, A., Pourfarzi, F., Poustchi, H., Pradeepa, R., Price, J. F., Providencia, R., Puder, J. J., Puhakka, S. E., Punab, M., Qorbani, M., Bao, T. Q., Radisaukas, R., Rahimikazerooni, S., Raitakari, O., Rao, S. R., Ramachandran, A., Ramos, E., Ramos, R., Rampal, L., Rampal, S., Redon, J., Reganit, P. F. M., Revilla, L., Rezaianzadeh, A., Ribeiro, R., Richter, A., Rigo, F., Rinke De Wit, T. F., Rodríguez-Artalejo, F., Del Cristo Rodríguez-Perez, M., Rodríguez-Villamizar, L. A., Roggenbuck, U., Rojas-Martinez, R., Romaguera, D., Romeo, E. L., Rosengren, A., Roy, J. G. R., Rubinstein, A., Ruidavets, J. B., Ruiz-Betancourt, B. S., Russo, P., Rust, P., Rutkowski, M., Sabanayagam, C., Sachdev, H. S., Sadjadi, A., Safarpour, A. R., Safiri, S., Saidi, O., Saki, N., Salanave, B., Salmerón, D., Salomaa, V., Salonen, J. T., Salvetti, M., Sánchez-Abanto, J., Sans, S., Santaliestra-Pasias, A. M., Santos, D. A., Santos, M. P., Santos, R., Saramies, J. L., Sardinha, L. B., Sarrafzadegan, N., Saum, K. U., Savva, S. C., Sawada, N., Sbaraini, M., Scazufca, M., Schaan, B. D., Schargrodsky, H., Scheidt-Nave, C., Schienkiewitz, A., Schipf, S., Schmidt, C. O., Schöttker, B., Schramm, S., Seibert, S., Sein, A. A., Sen, A., Sepanlou, S. G., Servais, J., Shakeri, R., Shalnova, S. A., Shamah-Levy, T., Sharafkhah, M., Sharma, S. K., Shaw, J. E., Shayanrad, A., Shi, Z., Shibuya, K., Shimizu-Furusawa, H., Shin, D. W., Shin, Y., Shirani, M., Shiri, R., Shrestha, N., Si-Ramlee, K., Siani, A., Siantar, R., Sibai, A. M., Silva, D. A. S., Simon, M., Simons, J., Simons, L. A., Sjöström, M., Skaaby, T., Slowikowska-Hilczler, J., Slusarczyk, P., Smeeth, L., Snijder, M. B., Söderberg, S., Soemantri, A., Sofat, R., Solfrizzi, V., Somi, M. H., Sonestedt, E., Sørensen, T. I. A., Jérôme, C. S., Soumaré, A., Sozmen, K., Sparrenberger, K., Staessen, J. A., Stathopoulou, M. G., Stavreski, B., Steene-Johannessen, J., Stehle, P., Stein, A. D., Stessman, J., Stevanović, R., Stieber, J., Stöckl, D., Stokwizewski, J., Stronks, K., Strufaldi, M. W., Suárez-Medina, R., Sun, C. A., Sundström, J., Suriyawongpaisal, P., Sy, R. G., Sylva, R. C., Szklo, M., Tai, E. S., Tamosiunas, A., Tan, E. J., Tarawneh, M. R., Tarqui-Mamani, C. B., Taylor, A., Taylor, J., Tell, G. S., Tello, T., Thankappan, K. R.,</p>				

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	<p>Thijs, L., Thuesen, B. H., Toft, U., Tolonen, H. K., Tolstrup, J. S., Topbas, M., Topór-Madry, R., Tormo, M. J., Tornaritis, M. J., Torrent, M., Torres-Collado, L., Traissac, P., Trinh, O. T. H., Truthmann, J., Tsugane, S., Tulloch-Reid, M. K., Tuomainen, T. P., Tuomilehto, J., Tybjaerg-Hansen, A., Tzourio, C., Ueda, P., Ugel, E., Ulmer, H., Unal, B., Uusitalo, H. M. T., Valdivia, G., Valvi, D., Van Dam, R. M., Van Der Schouw, Y. T., Van Herck, K., Van Minh, H., Van Rossem, L., Van Schoor, N. M., Van Valkengoed, I. G. M., Vanderschueren, D., Vanuzzo, D., Varbo, A., Varona-Pérez, P., Vasan, S. K., Vatten, L., Vega, T., Veidebaum, T., Velasquez-Melendez, G., Venero-Fernández, S. J., Veronesi, G., Verschuren, W. M. M., Victora, C. G., Vidiawati, D., Viet, L., Villalpando, S., Vioque, J., Virtanen, J. K., Visvikis-Siest, S., Viswanathan, B., Vlasoff, T., Vollenweider, P., Voutilainen, A., Wade, A. N., Wagner, A., Walton, J., Bebakar, W. M. W., Mohamud, W. N. W., Wang, M. D., Wang, N., Wang, Q., Wang, Y. X., Wang, Y. W., Wannamethee, S. G., Wedderkopp, N., Wei, W., Whincup, P. H., Widhalm, K., Widyahening, I. S., Wiecek, A., Wijga, A. H., Wilks, R. J., Willeit, J., Willeit, P., Wilsgaard, T., Wojtyniak, B., Wong-Mcclure, R. A., Wong, A., Wong, T. Y., Woo, J., Woodward, M., Wu, F. C., Wu, S., Xu, H., Xu, L., Yan, W., Yang, X., Yasuharu, T., Ye, X., Yeow, T. P., Yiallourous, P. K., Yoosefi, M., Yoshihara, A., You, S. L., Younger-Coleman, N. O., Yusoff, A. F., Zainuddin, A. A., Zakavi, S. R., Zali, M. R., Zamani, F., Zambon, S., Zampelas, A., Zaw, K. K., Zdrojewski, T., Vrkic, T. Z., Zhang, Z. Y., Zhao, W., Zhen, S., Zheng, Y., Zholdin, B., Zhussupov, B., Zoghiami, N., Cisneros, J. Z., Gregg, E. W., Ezzati, M. and Collaboration, N. C. D. Risk Factor Repositioning of the global epicentre of non-optimal cholesterol Nature; 2020, 582 (7810): 73-77</p> <p>Address: Harvard T. H. Chan School of Public Health, Boston, MA, United States University of Auckland, Auckland, New Zealand Tehran University of Medical Sciences, Tehran, Iran Middlesex University, London, United Kingdom Shahid Beheshti University of Medical Sciences, Tehran, Iran Rush University Medical Center, Chicago, IL, United States Institute for Clinical Effectiveness and Health Policy, Buenos Aires, Argentina Harvard Medical School, Boston, MA, United States Erasmus Medical Center Rotterdam, Rotterdam, Netherlands World Health Organization, Geneva, Switzerland Independent researcher, Los Angeles, CA, United States University of California Berkeley, Berkeley, CA, United States Mahidol University, Nakhon Pathom, Thailand Charles University in Prague, Prague, Czech Republic Thomayer Hospital, Prague, Czech Republic Istituto Superiore di Sanità, Rome, Italy South African Medical Research Council, Cape Town, South Africa Seoul National University, Seoul, South Korea Finnish Institute for Health and Welfare, Helsinki, Finland ICMR-National Institute of Nutrition, Hyderabad, India</p>				

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	University of Malta, Msida, Malta Istanbul University – Cerrahpasa, Istanbul, Turkey Universidade Federal de Juiz de Fora, Juiz de Fora, Brazil Gaetano Fucito Hospital, Mercato San Severino, Italy University of Porto, Porto, Portugal Santiago de Compostela University, Santiago, Spain Council for Agricultural Research and Economics, Rome, Italy Research and Education Institute of Child Health, Nicosia, Cyprus Dr. A. Ramachandran’s Diabetes Hospital, Chennai, India University College London, London, United Kingdom Academia Sinica, Taipei, Taiwan Capital Institute of Pediatrics, Beijing, China Kailuan General Hospital, Tangshan, China Duke-NUS Medical School, Singapore, Singapore Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran The Gertner Institute for Epidemiology and Health Policy Research, Ramat Gan, Israel Ministry of Health and Welfare, Taipei, Taiwan Murcia Health Council, Murcia, Spain Seoul National University College of Medicine, Seoul, South Korea Korea Centers for Disease Control and Prevention, Cheongju-si, South Korea Medical University of Silesia, Katowice, Poland Katholieke Universiteit Leuven, Leuven, Belgium Statistics Canada, Ottawa, ON, Canada Ghent University, Ghent, Belgium Agency for Preventive and Social Medicine, Bregenz, Austria Federal University of Maranhão, São Luís, Brazil University of Southampton, Southampton, United Kingdom Institut Pasteur de Lille, Lille, France CIBEROBN, Madrid, Spain University of Debrecen, Debrecen, Hungary Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil National Council of Research, Reggio Calabria, Italy Federal University of Santa Catarina, Florianópolis, Brazil Eduardo Mondlane University, Maputo, Mozambique Geneva University Hospitals, Geneva, Switzerland National Research Centre for Preventive Medicine, Moscow, Russian Federation University of Montreal, Montreal, QC, Canada French Public Health Agency, St Maurice, France Mediterranea Cardiocentro, Naples, Italy University of Zagreb, Zagreb, Croatia Ministry of Health and Medical Education, Tehran, Iran University of Queensland, Brisbane, QLD, Australia Universidad de Cuenca, Cuenca, Ecuador				

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	Helmholtz Zentrum München, Munich, Germany Carol Davila University of Medicine and Pharmacy, Bucharest, Romania University Hospital Düsseldorf, Düsseldorf, Germany National Institute of Cardiology, Warsaw, Poland Beth Israel Deaconess Medical Center, Boston, MA, United States University of Latvia, Riga, Latvia Ministry of Health and Medical Services, Gizo, Solomon Islands Hormozgan University of Medical Sciences, Bandar Abbas, Iran University of Skövde, Skövde, Sweden National Institute of Nutrition and Food Technology, Tunis, Tunisia The University of the West Indies, Kingston, Jamaica Institut Hospital del Mar d'Investigacions Mèdiques, Barcelona, Spain University of Stellenbosch, Cape Town, South Africa University of Duisburg-Essen, Duisburg, Germany Karadeniz Technical University, Trabzon, Turkey University of Helsinki, Helsinki, Finland Mashhad University of Medical Sciences, Mashhad, Iran Rafsanjan University of Medical Sciences, Rafsanjan, Iran Queen's University of Belfast, Belfast, United Kingdom University of Zurich, Zurich, Switzerland Tabriz University of Medical Sciences, Tabriz, Iran Fasa University of Medical Sciences, Fasa, Iran Shiraz University of Medical Sciences, Shiraz, Iran Centro de Salud Villanueva Norte, Badajoz, Spain Servicio Extremeño de Salud, Badajoz, Spain Ministry of Health, Buenos Aires, Argentina Universiti Sains Malaysia, Kelantan, Malaysia Umeå University, Umeå, Sweden Federal University of São Paulo, São Paulo, Brazil Hospital Universitario Son Espases, Palma, Spain Kindai University, Osaka-Sayama, Japan Kyoto University, Kyoto, Japan Medical University of Warsaw, Warsaw, Poland University of Catania, Catania, Italy CIBER en Epidemiología y Salud Pública, Alicante, Spain CIBER en Epidemiología y Salud Pública, Barcelona, Spain Universidade Federal de Minas Gerais, Belo Horizonte, Brazil Wageningen University, Wageningen, Netherlands B. P. Koirala Institute of Health Sciences, Dharan, Nepal University of Insubria, Varese, Italy University of Adelaide, Adelaide, SA, Australia Lund University, Lund, Sweden McGill University, Montreal, QC, Canada Universidad Politécnica de Madrid, Madrid, Spain				

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	St Anne's University Hospital, Brno, Czech Republic National Institute of Public Health, Cuernavaca, Mexico Centro de Estudios en Diabetes A.C., Mexico City, Mexico Universidad Autónoma de Santo Domingo, Santo Domingo, Dominican Republic Institute for Clinical and Experimental Medicine, Prague, Czech Republic Jagiellonian University Medical College, Kraków, Poland University of Southern Denmark, Odense, Denmark National Center of Cardiovascular Diseases, Beijing, China Singapore Eye Research Institute, Singapore, Singapore Icelandic Heart Association, Kopavogur, Iceland Universidad Icesi, Cali, Colombia Eternal Heart Care Centre and Research Institute, Jaipur, India National Health Insurance Service, Wonju, South Korea Prevention of Metabolic Disorders Research Center, Tehran, Iran The University of the West Indies, Cave Hill, Barbados Kermanshah University of Medical Sciences, Kermanshah, Iran University of Eastern Finland, Kuopio, Finland Kyushu University, Fukuoka, Japan University of Bergen, Bergen, Norway Tulane University, New Orleans, LA, United States Chinese Center for Disease Control and Prevention, Beijing, China Joep Lange Institute, Amsterdam, Netherlands Chronic Diseases Research Center, Tehran, Iran University of Hong Kong, Hong Kong, China The Chinese University of Hong Kong, Hong Kong, China University of Western Australia, Perth, WA, Australia Kingston Health Sciences Centre, Kingston, ON, Canada Heart Institute, São Paulo, Brazil Fundación Oftalmológica de Santander, Bucaramanga, Colombia University Oran 1, Oran, Algeria Independent Public Health Specialist, Nay Pyi Taw, Myanmar Ministry of Health and Sports, Nay Pyi Taw, Myanmar CIBER en Epidemiología y Salud Pública, Murcia, Spain VU University Medical Center, Amsterdam, Netherlands International Agency for Research on Cancer, Lyon, France American University of Beirut, Beirut, Lebanon Cairo University, Cairo, Egypt University of Zaragoza, Zaragoza, Spain National Institutes of Biomedical Innovation, Health and Nutrition, Tokyo, Japan Medical University Varna, Varna, Bulgaria The University of Tokyo, Tokyo, Japan The Hospital for Sick Children, Toronto, ON, Canada Niigata University, Niigata, Japan Hadassah University Medical Center, Jerusalem, Israel				

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	<p>Norwegian University of Science and Technology, Trondheim, Norway University of Melbourne, Melbourne, VIC, Australia University Hospital Centre Zagreb, Zagreb, Croatia University of Zagreb School of Medicine, Zagreb, Croatia Heart Foundation, Melbourne, VIC, Australia Guangzhou 12th Hospital, Guangzhou, China Universidad Eugenio Maria de Hostos, Santo Domingo, Dominican Republic Simon Fraser University, Burnaby, BC, Canada Ruprecht-Karls-University of Heidelberg, Heidelberg, Germany World Health Organization Country Office, Delhi, India Guilan University of Medical Sciences, Rasht, Iran University of Opole, Opole, Poland University of Crete, Heraklion, Greece Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia Maharajgunj Medical Campus, Kathmandu, Nepal Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States National Institute of Epidemiology, Chennai, India University of Münster, Münster, Germany Research Institute for Primordial Prevention of Non-Communicable Disease, Isfahan, Iran Kyrgyz State Medical Academy, Bishkek, Kyrgyzstan Research Institute of Child Nutrition, Dortmund, Germany Mazandaran University of Medical Sciences, Sari, Iran Hypertension Research Center, Isfahan, Iran Medical University of Innsbruck, Innsbruck, Austria Muhimbili University of Health and Allied Sciences, Dar es Salaam, Tanzania Yonsei University College of Medicine, Seoul, South Korea National Cancer Center, Goyang-si, South Korea University of Pennsylvania, Philadelphia, PA, United States University of Vienna, Vienna, Austria Oulu Deaconess Institute Foundation, Oulu, Finland Tartu University Clinics, Tartu, Estonia Kansai Medical University, Hirakata, Japan Ministry of Health and Quality of Life, Port Louis, Mauritius University Hospital Ulm, Ulm, Germany University of Groningen, Groningen, Netherlands University of Jyväskylä, Jyväskylä, Finland African Population and Health Research Center, Nairobi, Kenya Higher Institute of Health Sciences of Settat, Settat, Morocco Ministry of Health, Algiers, Algeria Harokopio University, Athens, Greece Sahlgrenska Academy, Gothenburg, Sweden Endocrinology and Metabolism Research Center, Tehran, Iran University of Public Health, Yangon, Myanmar</p>				

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	National University of Singapore, Singapore, Singapore Tampere University Hospital, Tampere, Finland Tampere University, Tampere, Finland University of Cape Town, Cape Town, South Africa West Virginia University, Morgantown, WV, United States Oswaldo Cruz Foundation Rene Rachou Research Institute, Belo Horizonte, Brazil National Taiwan University, Taipei, Taiwan University of Chinese Academy of Sciences, Shanghai, China Uppsala University, Uppsala, Sweden National Institute for Health Development, Tallinn, Estonia Universidad San Martín de Porres, Lima, Peru Consejería de Sanidad Junta de Castilla y León, Valladolid, Spain Norrbotten County Council, Luleå, Sweden Peking University, Beijing, China Universidade Federal de Ouro Preto, Ouro Preto, Brazil University of Coimbra, Coimbra, Portugal The Jikei University School of Medicine, Tokyo, Japan Institute of Neuroscience of the National Research Council, Padua, Italy Baker Heart and Diabetes Institute, Melbourne, VIC, Australia Agricultural University of Athens, Athens, Greece French National Research Institute for Sustainable Development, Montpellier, France Hospital Israelita Albert Einstein, São Paulo, Brazil University of Otago, Dunedin, New Zealand University of Padua, Padua, Italy Lausanne University Hospital, Lausanne, Switzerland Emory University, Atlanta, GA, United States Universidade Estadual do Centro-Oeste, Guarapuava, Brazil UiT The Arctic University of Norway, Tromsø, Norway Cape Peninsula University of Technology, Cape Town, South Africa Brown University, Providence, RI, United States University of Edinburgh, Edinburgh, United Kingdom University College Dublin, Dublin, Ireland Shahid Sadoughi University of Medical Sciences, Yazd, Iran Institut National de la Santé et de la Recherche Médicale, Lille, France ICMR–National Institute of Medical Statistics, New Delhi, India Lusófona University, Lisbon, Portugal Women’s Social and Health Studies Foundation, Trivandrum, India Università degli Studi di Firenze, Florence, Italy Ain Shams University, Cairo, Egypt Isfahan Cardiovascular Research Center, Isfahan, Iran University of Strasbourg, Strasbourg, France Strasbourg University Hospital, Strasbourg, France University of Pécs, Pécs, Hungary				

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	<p>Mulago Hospital, Kampala, Uganda University of Medical Sciences of Cienfuegos, Cienfuegos, Cuba Royal College of Surgeons in Ireland Dublin, Dublin, Ireland La Trobe University, Melbourne, VIC, Australia International Institute of Molecular and Cell Biology, Warsaw, Poland Instituto Conmemorativo Gorgas de Estudios de la Salud, Panama City, Panama World Health Organization Country Office, Lilongwe, Malawi University of Brescia, Brescia, Italy Bushehr University of Medical Sciences, Bushehr, Iran Ulm University, Ulm, Germany Kobe University, Kobe, Japan Suraj Eye Institute, Nagpur, India University Medicine of Greifswald, Greifswald, Germany University of Medicine and Pharmacy at Ho Chi Minh City, Ho Chi Minh City, Viet Nam Hanoi Medical University, Hanoi, Viet Nam Miami Veterans Affairs Healthcare System, Miami, FL, United States University of Turku, Turku, Finland Eastern Mediterranean Public Health Network, Amman, Jordan University of Manchester, Manchester, United Kingdom Japan Wildlife Research Center, Tokyo, Japan Istanbul University, Istanbul, Turkey Ministry of Health, Bandar Seri Begawan, Brunei Darussalam University of Madeira, Funchal, Portugal MRC Lifecourse Epidemiology Unit, Southampton, United Kingdom University of Novi Sad, Novi Sad, Serbia Kwame Nkrumah University of Science and Technology, Kumasi, Ghana Institute for Social and Preventive Medicine, Ottawa, ON, Canada IRCCS Ente Ospedaliero Specializzato in Gastroenterologia S. de Bellis, Bari, Italy Jivandeep Hospital, Anand, India South African Medical Research Council, Durban, South Africa Vietnam National Heart Institute, Hanoi, Viet Nam Clínica de Medicina Avanzada Dr. Abel González, Santo Domingo, Dominican Republic Leibniz Institute for Prevention Research and Epidemiology – BIPS, Bremen, Germany University of Sarajevo, Sarajevo, Bosnia and Herzegovina Cardiovascular Prevention Centre, Udine, Italy Public Health Agency of Catalonia, Barcelona, Spain Observatorio de Salud Pública de Santander, Bucaramanga, Colombia Ardabil University of Medical Sciences, Ardabil, Iran Alborz University of Medical Sciences, Karaj, Iran Ministry of Health, Hanoi, Viet Nam India Diabetes Research Foundation, Chennai, India</p>				

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	Institut Universitari d'Investigació en Atenció Primària Jordi Gol, Girona, Spain Universiti Putra Malaysia, Serdang, Malaysia University of Malaya, Kuala Lumpur, Malaysia University of Valencia, Valencia, Spain University of the Philippines, Manila, Philippines Minas Gerais State Secretariat for Health, Belo Horizonte, Brazil CS S. Agustín Ibsalut, Palma, Spain Amsterdam Institute for Global Health and Development, Amsterdam, Netherlands Canarian Health Service, Tenerife, Spain Universidad Industrial de Santander, Bucaramanga, Colombia Associazione Calabrese di Epatologia, Reggio Calabria, Italy Sahlgrenska University Hospital, Gothenburg, Sweden Toulouse University Hospital, Toulouse, France Institute of Food Sciences of the National Research Council, Avellino, Italy Sitaram Bhartia Institute of Science and Research, New Delhi, India Faculty of Medicine of Tunis, Tunis, Tunisia National Institute of Health, Lima, Peru Catalan Department of Health, Barcelona, Spain Universidade de Lisboa, Lisbon, Portugal South Karelia Social and Health Care District, Lappeenranta, Finland Cardiovascular Research Institute, Isfahan, Iran National Cancer Center, Tokyo, Japan University of São Paulo Clinics Hospital, São Paulo, Brazil Hospital Italiano de Buenos Aires, Buenos Aires, Argentina Center for Oral Health Services and Research Mid-Norway, Trondheim, Norway King's College London, London, United Kingdom National Center for Global Health and Medicine, Tokyo, Japan Sungkyunkwan University, Seoul, South Korea Finnish Institute of Occupational Health, Helsinki, Finland St Vincent's Hospital, Sydney, NSW, Australia University of New South Wales, Sydney, NSW, Australia Karolinska Institutet, Stockholm, Sweden Research Centre for Prevention and Health, Glostrup, Denmark London School of Hygiene & Tropical Medicine, London, United Kingdom Diponegoro University, Semarang, Indonesia University of Bari, Bari, Italy University of Copenhagen, Copenhagen, Denmark Institut Régional de Santé Publique, Ouidah, Benin University of Bordeaux, Bordeaux, France Izmir Katip Çelebi University, Izmir, Turkey University of Leuven, Leuven, Belgium Institut National de la Santé et de la Recherche Médicale, Nancy, France Bonn University, Bonn, Germany Croatian Institute of Public Health, Zagreb, Croatia				

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	<p>National Institute of Public Health–National Institute of Hygiene, Warsaw, Poland National Institute of Hygiene, Epidemiology and Microbiology, Havana, Cuba Fu Jen Catholic University, Taipei, Taiwan National Statistic Office of Cabo Verde, Praia, Cape Verde Ministry of Health, Amman, Jordan Central University of Kerala, Kasaragod, India Health Service of Murcia, Murcia, Spain Institut d’Investigacio Sanitaria Illes Balears, Menorca, Spain Universidad Centro-Occidental Lisandro Alvarado, Barquisimeto, Venezuela Dokuz Eylul University, Izmir, Turkey University of Tampere Tays Eye Center, Tampere, Finland Icahn School of Medicine at Mount Sinai, New York City, NY, United States Utrecht University, Utrecht, Netherlands Hanoi University of Public Health, Hanoi, Viet Nam University Medical Center Utrecht, Utrecht, Netherlands Universitas Indonesia, Jakarta, Indonesia Instituto de Investigación Sanitaria y Biomédica de Alicante, Alicante, Spain North Karelian Center for Public Health, Joensuu, Finland University of the Witwatersrand, Johannesburg, South Africa Cork Institute of Technology, Cork, Ireland Institute for Medical Research, Kuala Lumpur, Malaysia Health Canada, Ottawa, ON, Canada Beijing Institute of Ophthalmology, Beijing, China Xinjiang Medical University, Urumqi, China Capital Medical University, Beijing, China St George’s, University of London, London, United Kingdom Medical University of Vienna, Vienna, Austria University of Oxford, Oxford, United Kingdom Institute of Food and Nutrition Development of Ministry of Agriculture and Rural Affairs, Beijing, China Children’s Hospital of Fudan University, Shanghai, China Penang Medical College, Penang, Malaysia University of Cyprus, Nicosia, Cyprus Iran University of Medical Sciences, Tehran, Iran Jiangsu Provincial Center for Disease Control and Prevention, Nanjing, China Sun Yat-sen University, Guangzhou, China West Kazakhstan State Medical University, Aktobe, Kazakhstan University of Ghana, Accra, Ghana Imperial College London, London, United Kingdom</p> <p>High blood cholesterol is typically considered a feature of wealthy western countries^{1,2}. However, dietary and behavioural determinants of blood cholesterol are changing rapidly throughout the world³ and countries are using lipid-lowering medications at varying rates. These changes can have distinct effects on the levels</p>				

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	<p>of high-density lipoprotein (HDL) cholesterol and non-HDL cholesterol, which have different effects on human health^{4,5}. However, the trends of HDL and non-HDL cholesterol levels over time have not been previously reported in a global analysis. Here we pooled 1,127 population-based studies that measured blood lipids in 102.6 million individuals aged 18 years and older to estimate trends from 1980 to 2018 in mean total, non-HDL and HDL cholesterol levels for 200 countries. Globally, there was little change in total or non-HDL cholesterol from 1980 to 2018. This was a net effect of increases in low- and middle-income countries, especially in east and southeast Asia, and decreases in high-income western countries, especially those in northwestern Europe, and in central and eastern Europe. As a result, countries with the highest level of non-HDL cholesterol—which is a marker of cardiovascular risk—changed from those in western Europe such as Belgium, Finland, Greenland, Iceland, Norway, Sweden, Switzerland and Malta in 1980 to those in Asia and the Pacific, such as Tokelau, Malaysia, The Philippines and Thailand. In 2017, high non-HDL cholesterol was responsible for an estimated 3.9 million (95% credible interval 3.7 million–4.2 million) worldwide deaths, half of which occurred in east, southeast and south Asia. The global repositioning of lipid-related risk, with non-optimal cholesterol shifting from a distinct feature of high-income countries in northwestern Europe, north America and Australasia to one that affects countries in east and southeast Asia and Oceania should motivate the use of population-based policies and personal interventions to improve nutrition and enhance access to treatment throughout the world. © 2020, The Author(s), under exclusive licence to Springer Nature Limited.</p>				
626.	<p>Telugu, R. B., Chowhan, A. K., Rukmangadha, N., Patnayak, R., Phaneendra, B. V., Prasad, B. C. M. and Reddy, M. K. Estrogen and progesterone receptor in meningiomas: An immunohistochemical analysis Journal of Cancer Research and Therapeutics; 2020, 16 (6): 1482-1487 Address: [Telugu, Ramesh Babu] Christian Med Coll & Hosp, Dept Pathol, Vellore, Tamil Nadu, India. [Chowhan, Amit Kumar; Rukmangadha, Nandyala; Patnayak, Rashmi; Phaneendra, Bobbidi Venkata; Reddy, Mandyam Kumaraswamy] Sri Venkateswara Inst Med Sci, Dept Pathol, Tirupati 517507, Andhra Pradesh, India. [Prasad, Bodapati Chandra Mowliswara] Sri Venkateswara Inst Med Sci, Dept Neurosurg, Tirupati, Andhra Pradesh, India. Chowhan, AK (corresponding author), Sri Venkateswara Inst Med Sci, Dept Pathol, Tirupati 517507, Andhra Pradesh, India. chowhanpath@gmail.com</p> <p>Background: Meningiomas are common slow-growing primary intracranial neoplasms attached to the dura mater and are composed of neoplastic meningothelial cells. Increased incidence of meningiomas in women with an increased tumor growth during pregnancy and a possible association with breast cancer suggested that female sex hormones have been involved in the growth of meningiomas. Antihormonal-targeted therapy would be beneficial in such patients.</p>	INT	JUL TO DEC	Pathology	WOS:000603064400045

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	<p>Aim: The aim of this study is to correlate the expression of estrogen receptor (ER) and progesterone receptor (PR) in meningiomas with gender, location, histological subtypes, and grade. Materials and Methods: This is a 31/2-year prospective and retrospective study of intracranial and intraspinal meningiomas. Clinical details of all the patients were noted from the computerized hospital information system. Immunohistochemistry for ER and PR was performed. Statistical analysis was performed using Chi-square test. Results: During the study period, there were 80 Grade I, 18 Grade II, and 2 Grade III meningiomas categorized as per the World Health Organization 2007 classification. The female-to-male ratio was 1.9:1 and the mean age was 47.8 years. ER was expressed in 2% of meningiomas. PR was expressed in 67.5% of Grade I and 66.6% of Grade II and none of Grade III meningiomas. Brain-invasive meningiomas showed 54.5% PR immunopositivity and negative for ER. Conclusion: ER and PR were expressed in 2% and 66% of meningiomas, respectively. Statistically significant relationship was not found between the positivity of PR in females and males of Grade I and Grade II/III meningiomas, intracranial and spinal tumors, Grade I and Grade II/III cases, and various histological subtypes of meningiomas.</p>				
627.	<p>Telugu, R. B., Gaikwad, P., Baitule, A., Michael, R. C., Mani, T. and Thomas, M. Myoepithelial Tumors of Salivary Gland: A Clinicopathologic and Immunohistochemical Study of 15 Patients with MIB-1 Correlation Head Neck Pathol; 2020,</p> <p>Address: Department of General Pathology, Christian Medical College, Vellore, Tamil Nadu, 632004, India. Department of Surgery Unit 1 - General Head & Neck Surgery, Christian Medical College, Vellore, India. Department of Head & Neck Surgery Unit-1, Christian Medical College, Vellore, India. Department of Biostatistics, Christian Medical College, Vellore, India. Department of General Pathology, Christian Medical College, Vellore, Tamil Nadu, 632004, India. thomasmeera2@gmail.com.</p> <p>Myoepithelial neoplasms are rare tumors of the salivary glands with predominant myoepithelial differentiation and a broad histologic spectrum. Their histological features, immunohistochemical profile and biological behavior are not well characterized and pose a diagnostic challenge. A total of 15 myoepithelial tumors, diagnosed during 2012 and 2019 were subcategorized and correlated with MIB-1 labeling index (LI) and various histological parameters. Immunohistochemical stains for MIB-1 and other antibodies were performed. Statistical analysis was done by chi-square test, Fisher's exact test and Kaplan Meier curve. Nine patients were male and six were female with the median age of 44 years (range 21-83 years). Of the 15 patients, 6 cases were classified as myoepithelioma (ME) and 9 cases as myoepithelial carcinoma (MECA). Parotid gland was the most common site (46.7%) followed by the palate. MEs showed well circumscribed tumor borders</p>	INT	JUL TO DEC	General Pathology, Surgery Unit 1 - General Head & Neck Surgery, Head & Neck Surgery Unit-1, Biostatistics	PMID: 32959208

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	whereas MECAs exhibited focal capsular to extensive invasion into adjacent tissues. Epithelioid cell morphology was most common followed by mixed cell morphology. MIB-1 LI was significantly associated with invasive tumor borders, necrosis and high mitosis. Increased frequency of recurrence was noted with high MIB-1 LI, though it was not statistically significant. MIB-1 LI was high in nearly all MECAs with focal capsular to extensive invasion while low in MEs. Myoepithelial tumor with multinodular growth pattern and focal capsular invasion may have an indolent behavior if mitotic activity and MIB-1 LI is low. Early diagnosis and treatment of MECAs significantly improves the patient's survival and prognosis.				
628.	Thachil, J. and Srivastava, A. SARS-2 Coronavirus-Associated Hemostatic Lung Abnormality in COVID-19: Is It Pulmonary Thrombosis or Pulmonary Embolism? Semin Thromb Hemost; 2020, 46 (7): 777-780 Address: Department of Haematology, Manchester University Hospitals, Manchester, United Kingdom. Department of Haematology, Christian Medical College, Vellore, India.	INT	JAN TO JUN	Clinical Haematology	PMID:32396963 PMC ID:7645824 H-INDEX:96 IF: 3.401 BIOXBIO (2018/2019)
629.	Thachil, J., Cushman, M. and Srivastava, A. A proposal for staging COVID-19 coagulopathy Res Pract Thromb Haemost; 2020, 4 (5): 731-736 Address: Department of Haematology Manchester University Hospitals Manchester UK. Department of Medicine Larner College of Medicine University of Vermont Burlington VT USA. Department of Haematology Christian Medical College Vellore India. Coronavirus disease 2019 (COVID-19) is associated with significant hypercoagulability. However, despite prophylactic anticoagulation, critically ill patients with this condition develop thromboses. This forum discusses the lungs as the epicenter for the hemostatic issues, puts forward a proposal for staging COVID-19 coagulopathy based on available diagnostic markers, and suggest considering current and future treatment options based on these different stages.	INT	JUL TO DEC	Haematology	PMID: 32685880 PMC:7272892
630.	Thakkar, P., David, J., Thilak, M., Abraham, A. and Srivastava, A. Casting under anaesthesia (CUA), a method of non surgical correction of knee flexion deformity (KFD) in Haemophilia Haemophilia; 2020, 26 122-123 Address: [Thakkar, Prince; David, Judy; Thilak, Merlyn] CMC, Dept Phys Med & Rehabil, Vellore , Tamil Nadu, India. [Abraham, Aby; Srivastava, Alok] CMC Vellore , Dept Haematol, Vellore , Tamil Nadu, India.	INT	JAN TO JUN	Physical Medicine and Rehabilitation, Clinical Haematology	WOS:000536674800225 H-INDEX:24 IF: 2.513 BIOXBIO (2018/2019)
631.	Thakkar, P., Prakash, N. B., Tharion, G., Shetty, S., Paul, T. V., Bondu, J. and Yadav, B. Evaluating bone loss with bone turnover markers following acute spinal cord injury Asian Spine Journal; 2020, 14 (1):	INT	JAN TO JUN	Physical Medicine and Rehabilitation, Endocrinology, Clinical Biochemistry, Biostatistics	SCOPUS H-INDEX:88 IF: 3.590 BIOXBIO (2018/2019)

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	<p>Address: Department of Physical Medicine and Rehabilitation, Christian Medical College, Vellore, India Department of Endocrinology, Christian Medical College, Vellore, India Department of Clinical Biochemistry, Christian Medical College, Vellore, India Department of Biostatistics, Christian Medical College, Vellore, India</p> <p>Study Design: Prospective observational study. Purpose: To evaluate bone turnover markers (BTMs) in individuals with acute spinal cord injury (SCI) and to compare the results with those of healthy controls and postmenopausal females. Overview of Literature: SCI significantly impacts bone health. Change in bone mineral density appears 6 months after SCI and rapid bone loss during the acute phase is often underestimated, resulting in osteoporosis and a high risk of sublesional fractures. However, few studies have evaluated BTMs in the Indian SCI population. Despite a high risk of fracture, there are no guidelines for the diagnosis, monitoring, and management of SCI-induced osteoporosis. Methods: Twenty patients within 1 month of traumatic SCI who had been admitted to a tertiary care rehabilitation center were included in this study. Serum BTMs, C telopeptide (CTX) as a bone resorption marker, and osteocalcin as a bone formation marker, were serially measured at baseline, and 3 and 6 months after SCI. BTMs of SCI patients were compared with those of a control group of age-matched healthy males, premenopausal females, and a vulnerable group of postmenopausal females. Results: BTMs were significantly elevated in patients with SCI, with maximum levels observed at the 3rd month of injury. At baseline, the bone resorption marker CTX was approximately 3 times higher in SCI patients than in the control male population and premenopausal females, and about double that of postmenopausal females. The rise in the bone formation marker was marginal in comparison to that of the bone resorption marker. BTMs were persistently elevated and did not reach the normative range until the 6th month of SCI. Conclusions: Raised bone resorption markers in comparison to bone formation markers indicate hyper-resorption-related bone loss following acute SCI. Markedly elevated bone resorption markers in the SCI population, compared with those in control and vulnerable groups, emphasize the need for early bone health monitoring and management. © 2020 by Korean Society of Spine Surgery.</p>				
632.	<p>Thakur, P., Kuriakose, C., Cherian, K. E., Asha, H. S., Kapoor, N. and Paul, T. V. Knowledge gap regarding osteoporosis among medical professionals in Southern India Journal of Evaluation in Clinical Practice; 2020, 26 (1): 272-280</p> <p>Address: [Thakur, Preyander; Kuriakose, Cijoy; Cherian, Kripa Elizabeth; Asha, Hesarghatta S.; Kapoor, Nitin; Paul, Thomas, V] Christian Med Coll & Hosp, Dept Endocrinol, Vellore 632004, Tamil Nadu, India. Paul, TV (reprint author), Christian Med Coll & Hosp, Dept Endocrinol, Vellore 632004, Tamil Nadu, India.</p>	INT	JAN TO JUN	Endocrinology	<p>WOS:000537991900036 SCOPUS H-INDEX:70 IF: 1.536 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>thomasvpaul@yahoo.com</p> <p>Rationale, aims, and objectives: Osteoporosis is a common health problem in India, which leads to significant morbidity and mortality in elderly individuals. Lack of knowledge and awareness among medical professionals is one of the important barriers in management of these patients. Therefore, this study was conducted to assess knowledge pertaining to diagnosis and treatment of osteoporosis among a group of Indian medical practitioners. Methods: The study participants included 222 allopathic medical professionals, either graduate or postgraduate working in primary or secondary health care levels. They were assessed using a previously validated Fogelman's multiple choice questionnaire. Out of a total of 18 questions, four questions pertained to knowledge of diagnosis, three questions to treatment decisions, one question to assess knowledge regarding recommended dosage of vitamin D and calcium supplementation, five questions concerned medication use, and the rest to assess attitude and practices. The correct answers were converted into scores and expressed as percentages with a maximum of 100. Results: The mean total score among them was 22.5%, which was quite low. Almost all of them had a score of less than 50%. Medical practitioners performed better in diagnosis-related questions, (19.4% answered all options correctly) than in medication knowledge (no correct response regarding side effects and 2% regarding contraindications). In treatment-related decisions, 37.4% answered correctly for duration of treatment, and 59% answered correctly for treatment goal. Only 1.4% of them were able to answer correctly regarding recommended calcium and vitamin D intake. Professional literature, conferences, and Continuing Medical Education (CME's) were regarded as the main sources of information on the subject by 40% of practitioners. Conclusion: This study showed suboptimal knowledge among a group of medical professionals regarding various aspects of diagnosis and management of osteoporosis, and it stipulates the need for escalating the efforts to improve their knowledge regarding various aspects of osteoporosis.</p>				
633.	<p>Thamaraiselvi, S., Priyadarshini, A., Arisalya, N., Samuel, R. and Jacob, K. S. Development and validation of Vellore Assessment of Social Performance among clients with chronic mental illness Indian J Psychiatry; 2020, 62 (2): 121-130</p> <p>Address: [Thamaraiselvi, S.; Priyadarshini, A.; Arisalya, Namrata; Samuel, Reema; Jacob, K. S.] Christian Med Coll & Hosp, Dept Psychiat, Vellore, Tamil Nadu, India. Samuel, R (reprint author), Christian Med Coll & Hosp, Dept Psychiat, Occupat Therapy Unit, Vellore, Tamil Nadu, India. reemasamuel@cmcvellore.ac.in</p> <p>BACKGROUND: Social skills deficits are hallmark symptoms of chronic mental illness. The absence of a culturally sensitive instrument to measure social skills in the Indian population demands the need to develop and standardize such instruments. AIM: The aim of this study was to develop and validate a context-</p>	NAT	JAN TO JUN	Psychiatry, Occupational Therapy Unit	<p>PMID:32382170 PMC ID: PMC7197823 WOS:000524502600004 SCOPUS H-INDEX:30 IF: 0.53 RG (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>specific, culturally relevant, and performance-based assessment scale for social performance. MATERIALS AND METHODS: An expert committee of mental health professionals reviewed existing literature, identified standardized scales, examined items for cultural relevance, and identified possible issues for measurement. The items were categorized into 5 domains with a 7-point scale. The instrument was initially piloted on 10 participants, then among 101 consecutive clients with chronic mental illness between 18 and 60 years of age who provided written informed consent. They were assessed by two therapists to evaluate inter-rater reliability and test-retest reliability. They were also assessed on the Social Interaction and Communication Skills Checklist (SICSC) to evaluate convergent validity and on the 12-item General Health Questionnaire (GHQ-12) to assess divergent validity. Standard statistical tests were used to study its characteristics. RESULTS: The scale had good inter-rater reliability (0.941; 95% confidence interval [CI]: 0.914, 0.960) and test-retest reliability (0.928; 95% CI: 0.810, 0.965). The correlation between total score of Vellore Assessment of Social Performance (VASP) and SICSC (Pearson's correlation coefficient = 0.696; P = 0.001) suggested moderate convergent validity. The correlation between total score of VASP and GHQ-12 (Pearson's correlation coefficient = -0.046; P = 0.648) implied good divergent validity. CONCLUSION: VASP seems to be a promising scale to assess social performance in people with mental illness.</p>				
634.	<p>Thampi, S., Jose, R., Kothandan, P., Jiwanmall, M. and Rai, E. Timeliness of care and adverse event profile in children undergoing general anesthesia or sedation for MRI: An observational prospective cohort study Saudi Journal of Anaesthesia; 2020, 14 (3): 311-317</p> <p>Address: Department of Anaesthesia, Christian Medical College, Vellore, Tamil Nadu, 632 004, India Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India</p> <p>Background and Aims: Anaesthesia for children undergoing magnetic resonance imaging (MRI) ranges from moderate to deep sedation in order to facilitate uninterrupted completion of the scan. While various intravenous and inhalational techniques of anaesthesia have their own merits and demerits, there is a paucity of comparative literature between the two in children undergoing diagnostic MRI. Materials and Methods: This prospective observational cohort study was conducted at the Radiology suite of a 2800-bedded tertiary care hospital, wherein 107 unpremedicated children between the ages of 6 months to 15 years received either sedation with propofol infusion (Group GSP, n = 57) or inhalational anaesthesia with a laryngeal mask airway (Group GAL, n = 50). Primary outcome measures included time to induction and time to recovery. Secondary outcomes comprised the incidence of respiratory and non-respiratory adverse events in the two groups. Results: The median time to induction was significantly shorter in GSP</p>	INT	JAN TO JUN	Anaesthesia, Biostatistics	<p>PMID: 32934622 PMC:7458030 SCOPUS H-INDEX:22 IF: 1.070 RESURCHIFY (2018/2019)</p>

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	than GAL [7.00 (IQR 5.0, 10.0) versus 10.00 minutes (IQR 8.8, 13.0), P < 0.001]; the incidence of desaturation [8 (16.0%) in GAL, 1 (1.8%) in GSP, P = 0.012], laryngospasm [11 (22.4%) in GAL, 1 (1.8%) in GSP, P = 0.001] and emergence delirium (5 (10%) in GAL, 0 in GSP, P = 0.047) were significantly greater in the GAL group. There was no difference in the time to emergence, nausea and vomiting or bradycardia between the two groups. Conclusion: Sedation with propofol infusion during paediatric MRI scan offers a short turnover time and favourable adverse event profile when compared to inhalational anaesthesia with an LMA. © 2020 Wolters Kluwer Medknow Publications. All rights reserved.				
635.	Thangadurai, P. Outcome of acute and transient psychotic disorders: a retrospective study from South India Indian Journal of Psychiatry; 2020, 62 S161-S161 Address: [Thangadurai, P.] Christian Med Coll & Hosp , Dept Psychiat, Vellore , Tamil Nadu, India.	NAT	JAN TO JUN	Psychiatry	WOS:000540356200546 H-INDEX:30 IF: 1.500 RG (2018/2019)
636.	Thangakunam, B. and Christopher, D. J. Xpert Ultra Is Better Than Xpert, but Using Biopsy Samples May Be Even Better Chest; 2020, 158 (2): 829-830 Address: Department of Pulmonary Medicine, Christian Medical College, Vellore , India. Electronic Address: drbalamugesh@yahoo.com. Department of Pulmonary Medicine, Christian Medical College, Vellore , India.	INT	JUL TO DEC	Pulmonary Medicine	PMID: 32768069
637.	Thangavel, S., Karthik, V. K., Babu, C. P., Shaji, R. V., Varghese, G. M., Srivastava, A. and Kannangai, R. The CCR5 Gene Editing of Hematopoietic Stem and Progenitor Cells for the Treatment of HIV Infection Molecular Therapy; 2020, 28 (4): 166-166 Address: [Thangavel, Saravanabhavan; Karthik, V. K.; Babu, C. Prathibha; Shaji, R. V.; Srivastava, Alok; Kannangai, Rajesh] Christian Med Coll & Hosp , Ctr Stem Cell Res CSCR, Vellore , Tamil Nadu, India. [Varghese, George M.] Christian Med Coll & Hosp, Vellore , Tamil Nadu, India.	INT	JAN TO JUN	Centre for Stem Cell Research, Infectious Disease	WOS:000530089300345 H-INDEX:168 IF: 8.402 RG (2018/2019)
638.	Tharakan, S. J., Peter Cv, D., Karthik, R., Rupa, V., Rose, W., Thomas, M., Manuel, M., Rupali, P., Pulimood, S. and Rao Ajampur, S. S. Case Report: A Single-Center Case Series on Skin Manifestations of Leishmaniasis from a Non-Endemic State in Southern India Am J Trop Med Hyg; 2020, Address: Departments of Dermatology Unit-II, Christian Medical College, Vellore , India. Infectious Diseases, Christian Medical College, Vellore , India. ENT Unit-III, Christian Medical College, Vellore , India. Child Health Unit-III, Christian Medical College, Vellore , India. Pathology, Christian Medical College, Vellore , India. The Wellcome Trust Research Laboratory, Christian Medical College, Vellore ,	INT	JUL TO DEC	Dermatology Unit-II, Infectious Diseases, ENT Unit-III, Child Health Unit-III, Pathology, The Wellcome Trust Research Laboratory	PMID: 33377447

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>India. Leishmaniasis is endemic in the Indian subcontinent with predominance of visceral leishmaniasis (VL) due to Leishmania donovani. Cutaneous leishmaniasis (CL) is uncommon, and mucocutaneous leishmaniasis (MCL) is rarely reported in this region. Recent reports reveal a changing epidemiology and atypical manifestations. A retrospective study of 52 suspected cases with cutaneous and mucosal involvement seen from January 2008 to December 2018 in a tertiary care setting in a non-endemic state in southern India is reported. Twelve patients were confirmed to have leishmaniasis; seven had MCL, two had CL, and three had post-kala-azar dermal leishmaniasis (PKDL). All cases were male, with a median age of 41.5 years (interquartile range, 30-55.5 years), and the median duration of the disease was 6 years (interquartile range, 1-9.5 years). Patients with MCL had mucosal involvement including destructive ulcero-proliferative lesions due to delayed diagnosis; none had a history of travel to countries endemic for MCL and all were attributable to L. donovani species. On the other hand, Leishmania major which was the causative species in both CL patients was associated with travel to the Middle East. Patients with PKDL presented with multiple plaques and hypopigmented patches; one had concomitant VL and all were from endemic areas. Hitherto uncommon MCL, caused by potentially atypical variants of L. donovani, has emerged as a new manifestation of leishmaniasis in this region. A high index of suspicion based on lesions seen and history of travel combined with PCR-based diagnostics are required to confirm diagnosis for the various skin manifestations of leishmaniasis.</p>				
639.	<p>Thiyagarajan, M., Anand, K., Dorairajan, G., Sagili, H. and Subbaiah, M. Wilson's Disease Diagnosed Postnatally Due to Neurological Manifestation J Obstet Gynaecol India; 2020, 70 (3): 230-233</p> <p>Address: 1Department of Obstetrics and Gynaecology, JIPMER, Puducherry, India. GRID: grid.414953.e. ISNI: 0000000417678301 3Department of Gynaecological Oncology, CMC, Vellore, India. GRID: grid.11586.3b. ISNI: 0000 0004 1767 8969 Apollo Centre for Fetal Medicine, New Delhi, India.</p>	NAT	JAN TO JUN	Gynaecologic Oncology	<p>PMID:32476771 PMC ID: PMC7239978 SCOPUS H-INDEX:NA IF: 0.560 RG (2018/2019)</p>
640.	<p>Thomas, A. S., Moorthy, R. K., Raju, K., Lakshmanan, J., Joy, M. and Mariappan, R. Measurement of non-invasive blood pressure in lateral decubitus position under general anaesthesia - Which arm gives more accurate BP in relation to invasive BP - dependent or non-dependent arm? Indian J Anaesth; 2020, 64 (7): 631-636</p> <p>Address: Department of Anaesthesia, Christian Medical College, Vellore, Tamil Nadu, India. Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, India. Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India.</p>	NAT	JUL TO DEC	Anaesthesia, Neurological Sciences, Biostatistics	<p>PMID: 32792741 PMC:7413357</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>BACKGROUND AND AIMS: Non-invasive blood pressure (NiBP) varies with the arm and body position. In the lateral decubitus position (LDP), the non-dependent arm reads lower, and the dependent arm reads higher pressure. We aimed to study the correlation between the NiBP and invasive arterial blood pressure (ABP) as anaesthesia progressed and its correlation in different BP ranges. METHODS: American Society of Anesthesiologists (ASA I-III) patients, between 18-70 years undergoing neurosurgical procedures in the LDP were studied. All were anaesthetised using a standard protocol, positioned in the LDP. NiBP was measured every 15 min in both dependent and non-dependent arms and correlated with the ABP. RESULTS: Intra-class correlation (ICC) done between the dependent arm NiBP and ABP showed good correlation for mean and systolic BP and moderate correlation for diastolic BP. ICC was 0.800, 0.846 and 0.818 for mean and 0.771, 0.782, 0.792 for systolic BP at 15 min, 1 h, and 2 h, respectively. The ICC between the non-dependent arm NiBP and the invasive ABP showed poor correlation for all BP (systolic, diastolic and mean). As anaesthesia progressed, the mean difference between the NiBP and the ABP decreased in the dependent arm and increased in the non-dependent arm. The strength of agreement between the NiBP and the ABP in various BP ranges showed moderate correlation for the dependent arm NiBP (0.45-0.54) and poor correlation (0.21-0.38) for the non-dependent arm. CONCLUSION: The NiBP of the dependent arm correlated well with ABP in LDP under general anaesthesia (GA). It is better to defer measuring NiBP in the non-dependent arm as the correlation with ABP is poor.</p>				
641.	<p>Thomas, A., Sebastian, A., George, R., Thomas, D. S., Rebekah, G., Rupali, P., Michael, J. S. and Peedicayil, A. Abdominal Tuberculosis Mimicking Ovarian Cancer: A Diagnostic Dilemma J Obstet Gynaecol India; 2020, 70 (4): 304-309</p> <p>Address: Department of Gynaecologic Oncology, Christian Medical College, Vellore, Tamil Nadu 632004, India Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu 632004, India Department of Infectious Diseases, Christian Medical College, Vellore, Tamil Nadu 632004, India Department of Clinical Microbiology, Christian Medical College, Vellore, Tamil Nadu 632004, India</p> <p>Aims: The objective of this study was to describe the clinicopathological details in patients referred to the Gynaecologic Oncology Department with possible ovarian or primary peritoneal cancer where the final diagnosis turned out to be abdominal tuberculosis. Methodology: Retrospective chart analysis of 23 cases diagnosed with abdominal tuberculosis who were admitted under the Division of Gynaecologic Oncology suspected to have disseminated peritoneal malignancy, during 2014-2017. Results: There were 23 patients who were referred to the Gynaecologic</p>	NAT	JAN TO JUN	Gynaecologic Oncology, Biostatistics, Infectious Disease, Clinical Microbiology	<p>PMID: 32764852 PMC:7381535 SCOPUS H-INDEX:14 IF: 0.300 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Oncology outpatient for evaluation of ascites, to rule out malignancy. The mean age of this patient group was 35 years (SD 14.5, range 14–65). The mean CA 125 was 333.5 [400.7 (9.09–1568)]. Ascitic fluid analysis confirmed TB in 26%; omental biopsy revealed TB in 69%, and operative diagnostic procedures (laparoscopy and laparotomy) were done in 15 of the 23 patients which had a positive pick up rate of 100% to confirm the diagnosis of TB. Culture of ascitic fluid/omental tissue and PCR yields were poor with a pick up rate of 33% and 6%. Conclusions: Abdominal TB is common in India and can mimic ovarian malignancy, and hence, high degree of suspicion needed. The isolation of AFB is the gold standard for diagnosis of pulmonary tuberculosis but has a low yield in abdominal TB. Ultrasound-guided procedure is reasonable as an initial procedure. As much time can be lost in working up these patients through multiple diagnostic algorithms using ascitic tap, USG biopsy and then an operative procedure, diagnostic laparoscopy could be considered early in the work up. It is a simple, time-saving and cost-effective way of establishing a diagnosis sooner with least complications. © 2020, Federation of Obstetric & Gynecological Societies of India.				
642.	<p>Thomas, B. P. and Pallapati, S. Congenital thumb differences- current concepts J Clin Orthop Trauma; 2020, 11 (4): 580-589</p> <p>Address: Dr Paul Brand Centre for Hand Surgery, Christian Medical College & Hospital, Vellore, India</p> <p>Anomalies of the thumb development are not uncommon and may be associated with a number of syndromes also. These anomalies range from total absence to duplication. Reconstructive surgery for the creation of an opposable thumb is the most rewarding aspect of Hand Surgery and also the most challenging. Classification systems have been modified for better description. A number of procedures have been introduced to improve the functionality of the hand in anomalies and age old concepts are undergoing a metamorphosis to further this. A brief description of the common conditions and their treatment are discussed here and highlighted by selected clinical cases. © 2020</p>	INT	JAN TO JUN	Hand Surgery	<p>PMID: 32684694 PMC:7355096 SCOPUS H-INDEX:15 IF: 4.154 BIOXBIO (2018/2019)</p>
643.	<p>Thomas, D. S., Thomas, V., Sebastian, A., Thomas, A., Abraham, P., Chandy, R. and Peedicayil, A. HPV DNA Detection for Post-treatment Surveillance of Premalignant and Malignant Lesions of Cervix Indian Journal of Gynecologic Oncology; 2020, 18 (1): Address: Department of Gynaecologic Oncology, Christian Medical College, Vellore, Tamil Nadu 632004, India Department of Clinical Virology, Christian Medical College, Vellore, 632004, India</p> <p>Background: Persistence of human papilloma virus (HPV) after treatment for</p>	NAT	JAN TO JUN	Gynaecologic Oncology, Clinical Virology	<p>SCOPUS H-INDEX:2 IF: 1.700 RG (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>cervical neoplasia may be indicative of local recurrence. The aim of this study was to determine the prevalence of HPV in cervix or vagina after treatment for cervical neoplasia and to ascertain its association with local recurrence. Methodology: Data were collected retrospectively from electronic hospital medical records. The cohort consisted of women who had undergone treatment for CIN 2, CIN 3 or cervical cancer between 1 January 2014 and 31 December 2016 at a teaching hospital in India for whom post-treatment HPV results were available. Local recurrence was defined as a positive vaginal or cervical biopsy or positive radiological (PET CT) findings. Results: Out of a total of 101 patients, 26 had CIN 2 or 3 and 75 had cervical cancer. Post-treatment HPV was done in precancers and cancers after a mean duration of 14.9 and 8.2 months, respectively. Positive HPV detection occurred in 46.2% of precancers and 18.7% of cancers. Of the 12 precancers with positive post-treatment HPV, seven (58.3%) had recurrence, whereas among 14 cancers, three (21.4%) had recurrence. The relative risk (RR) was 4.1 (95% CI 1, 16.1) and p value 0.03 for recurrence with a positive HPV test after treatment for CIN as compared to a negative HPV result. For cancers, the RR was 3.3 (0.8, 13.9), with p = 0.09. Conclusion: Positive HPV detection post-treatment is a risk factor for local recurrence in cervical neoplasia, especially in premalignant lesions. Hence, HPV testing may be useful for post-treatment surveillance. © 2019, Association of Gynecologic Oncologists of India.</p>				
644.	<p>Thomas, Leenath, Anandan, Shalini, Verghese, Valsan Philip, Balaji, Veeraraghavan, Gowri, S Mahasampath, Chacko, Anila, Punnen, Anu and Rose, Winsley Clinical Characteristics, Laboratory Profile and Outcome of Children with Vibrio Cholerae Gastroenteritis (Both O1 and Non-O1/Non-O139) and Vibrio Cholerae (Non-O1/Non-O139) Bacteraemia- A Retrospective Single Centre Study Journal of Clinical and Diagnostic Research. 2020 Apr, Vol-14(4): SC01-SC06</p> <p>PARTICULARS OF CONTRIBUTORS:</p> <ol style="list-style-type: none"> 1. Assistant Professor, Department of Paediatrics, Christian Medical College, Vellore, Tamil Nadu, India. 2. Professor, Department of Microbiology, Christian Medical College, Vellore, Tamil Nadu, India. 3. Professor, Department of Paediatrics, Christian Medical College, Vellore, Tamil Nadu, India. 4. Professor, Department of Microbiology, Christian Medical College, Vellore, Tamil Nadu, India. 5. Statistician, Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India. 6. Associate Professor, Department of Paediatrics, Christian Medical College, Vellore, Tamil Nadu, India. 7. Assistant Professor, Department of Paediatrics, Christian Medical College, Vellore, Tamil Nadu, India. 8. Professor, Department of Paediatrics, Christian Medical College, Vellore, Tamil 	NAT	JUL TO DEC	Paediatrics, Microbiology, Biostatistics	PMC 8603

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Nadu, India.</p> <p>Introduction: <i>Vibrio cholerae</i> (<i>V. cholerae</i>) infection (O1, O139, and non-O1/non-O139) in children can occur in the form of gastroenteritis and bacteraemia. Aim: To describe and compare the clinical characteristics, laboratory profile and outcome of children with gastroenteritis due to <i>V. cholerae</i> O1, O139 and <i>V. cholerae</i> non-O1/non-O139 and to present a case series describing the clinical and laboratory profile and outcome of children with <i>V. cholerae</i> non-O1/non-O139 bacteraemia. Materials and Methods: A retrospective study was conducted on the medical records of children under 15 years of age in whom <i>V. cholerae</i> was identified in stool culture or blood culture. The children who presented from January 2010 to November 2018 in Christian Medical College and Hospital, Vellore, India were included. The following details were noted: symptoms and signs (including vital signs and state of dehydration) at presentation, co-morbidities, anthropometry, complete blood counts, serum electrolytes, creatinine, reports of stool culture, blood culture and antibiotic susceptibility, details of treatment given (including hospital admission, IV fluids and antibiotics) and outcome. The group-wise comparison for continuous variables was done using Independent t-test. The categorical data among the groups were compared using the chi-square test. Results: Among the 8990 stool cultures and 1,23,005 blood cultures done in children during the study period for various reasons, <i>V. cholerae</i> had grown in stool culture of 105 children and blood culture of six children. Children with <i>V. cholerae</i> O1 were more tachypnoeic/acidotic (44.8% vs. 10.0%; $p < 0.001$), had dehydration and shock (65.5% vs. 6.6%; $p < 0.001$) at presentation and required hospital admission more often (87.3% vs. 18.1%, $p < 0.001$) compared to <i>V. cholerae</i> non-O1/non-O139. Both isolates in stool culture were susceptible to cefotaxime, norfloxacin and tetracycline. All six children with <i>V. cholerae</i> non-O1/non-O139 bacteraemia had co-morbidities and 66% of them had chronic liver disease. About 50% of these children ($n=3$) succumbed to the illness in the first week of illness itself and 2 of them were infants. Conclusion: The gastroenteritis due to <i>V. cholerae</i> O1 was more severe than that with <i>V. cholerae</i> non-O1/non-O139. Children with chronic liver disease and immunodeficiency were particularly susceptible to non-O1/non-139 <i>V. cholerae</i> bacteraemia.</p>				
645.	<p>Thomas, S., Chacko, R., Khanapur, G. D., Kattula, D. and Rose, A. Oral health status and treatment needs of school going children in a tribal area in Southern India European Journal of Public Health; 2020, 30 V170-V170 Address: [Thomas, S.] Ramalingaswami Ctr Equ & Social Determinants Hlth, Publ Hlth Fdn India, Bengaluru, India. [Chacko, R.; Khanapur, G. D.] Christian Med Coll & Hosp, Dept Dent & Oral Surg, Vellore, Tamil Nadu, India. [Kattula, D.] Ragas Dent Coll & Hosp, Dept Conservat Dent & Endodont, Chennai, Tamil Nadu, India. [Rose, A.] Christian Med Coll & Hosp, Dept Community Hlth, Vellore, Tamil Nadu, India. drsophiathomas@gmail.com</p>	INT	JUL TO DEC	Dental and Oral Surgery, Community Health	WOS:000605268701136

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
646.	<p>Thomas, V. V., Mishra, A. K., Jasmine, S. and Sathyendra, S. Gram-negative infective endocarditis: a retrospective analysis of 10 years data on clinical spectrum, risk factor and outcome Monaldi Arch Chest Dis; 2020, 90 (4): Address: Internal Medicine, Christian Medical College and Hospital, Vellore, Tamil Nadu. Vvt212@gmail.com. Internal Medicine, Saint Vincent Hospital, Worcester, MA. Ajay.Mishra@stvincenthospital.com. Internal Medicine, Christian Medical College and Hospital, Vellore, Tamil Nadu. sudha_jasmine@yahoo.com. Internal Medicine, Christian Medical College and Hospital, Vellore, Tamil Nadu. sowmyaacademic@gmail.com.</p> <p>Infective endocarditis (IE) is a significant cause of morbidity and mortality. Underlying congenital heart disease and acquired valvular disease significantly increases the IE risk, which is still prevalent in developing countries. Gram-negative organism related IE prevalence appears to be rising with limited data on their presentation and outcomes. This study hopes to shed further light on this subject. This retrospective cross-sectional study occurred in a tertiary care center in South India. A retrospective cross-sectional study performed in a single tertiary care center in South India. All patients with IE from 2006 to 2016 were included in this study. The details of clinical presentation, laboratory investigations, clinical course, microbiology, and outcomes were obtained. Patients fulfilling the modified Duke's criteria and a culture-proven diagnosis of gram-negative IE were eligible for inclusion. A total of 27 patients were enrolled from Jan 2006 to Dec 2016, among whom 78% were male. Prior structural heart disease was common in our cohort (41%) with renal (55%) and embolic (51%) complications being the most common systemic complications. A comparison of mortality with survivors found that congenital and acquired structural heart disease had a higher risk of mortality. Non-fermenting GNB accounted for 52% of the cohort, with Pseudomonas accounting for 19%. E. coli was the most common bacilli isolated, constituting 37% of the cohort. Assessment of risk factors for adverse outcomes found that renal dysfunction and intravascular device were significant with multivariate-logarithmic analysis showing renal dysfunction as an independent risk factor. In-hospital mortality in this series was 30%. In conclusion, gram-negative IE was more prevalent among males. Underlying structural heart disease was the most common risk factor associated with the disease. Renal dysfunction and embolic complications were the most common complications in this cohort. E. coli and NFGNB accounted for 70% of the offending organisms. In-hospital mortality was similar to patients with IE secondary to common organisms. The presence of renal dysfunction was an independent risk factor for an adverse outcome.</p>	INT	JUL TO DEC	Internal Medicine	PMID: 33190470
647.	<p>Thomson, V. S., Chacko, S. T., Joseph, G. and Vimala, L. R. Percutaneous closure of right coronary artery to the left ventricle coronary cameral fistula in a case of congenitally absent left coronary artery</p>	INT	JAN TO JUN	Cardiology, Radiology	PMID:32413903 H-INDEX:112 IF: 2.551 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Eur Heart J; 2020, 41 (40): 3966-3967 Address: Department of Cardiology, Christian Medical College and Hospital, Vellore 632004, India. Department of Radiology, Christian Medical College and Hospital, Vellore 632004, India.				
648.	Thomson, V. S., Varghese, M. J., Chacko, S. T., Varghese, L., Alex, A. G., George, P. V., George, O. K., Joseph, G., Yadav, B. K. and John, J. Coronary artery disease management and cost implications with fractional flow reserve guided coronary intervention in Indian patients with stable ischemic coronary artery disease Catheter Cardiovasc Interv; 2020, Address: Department of Cardiology, Christian Medical College and Hospital, Vellore , India. Department of Biostatitics, Christian Medical College and Hospital, Vellore , India. Department of Community Health, Christian Medical College and Hospital, Vellore , India. Thomson, VS (reprint author), Christian Med Coll & Hosp , Dept Cardiol, Vellore 632004, Tamil Nadu, India. vijisamuel1970@gmail.com OBJECTIVES: To study the safety of stent avoidance, frequency of change in management decisions, and its cost implications while using a fractional flow reserve (FFR)-guided treatment strategy for intermediate-grade coronary artery stenosis. BACKGROUND: The impact of FFR in guiding management decisions and its cost implications has not been studied after imposition of a ceiling on stent prices by the Government of India. METHODS: In 400 patients with 477 intermediate-grade coronary lesions for whom coronary intervention was planned, functional assessment using FFR was done. Incidence of the primary composite endpoint (major adverse cardiac event [MACE], cardiac death, myocardial infarction, objective evidence of ischemia, and target vessel revascularization) in the stent avoided subset was compared with the stented group at follow-up. Micro-costing analysis was done using a computed model with current stent and FFR wire prices. RESULTS: The overall incidence of MACE was 4.9%, 0.9% in the stent-avoided subset and 6.9% in stented group (p = 0.04, comparing the latter two) at a median follow-up of 21 months (interquartile range 12-31 months). Serious adverse events occurred only in 1% of patients receiving adenosine. The average cost saving was Indian rupees (INR) 51,847 [United States Dollar (USD) 746] per patient, resulting in total savings of INR 15,813,379 (USD 227,530). Cost savings persisted but were lower by 36% (INR 18,613/USD 268 per patient) after the ceiling of stent prices. CONCLUSION: FFR-guided percutaneous coronary intervention (PCI) strategy is safe and cost-effective in countries where majority of patients self-finance their health care, resulting in stent and PCI avoidance in approximately one in three patients referred for coronary	INT	JAN TO JUN	Cardiology, Biostatistics, Community Health	PMID:32294309 WOS:000526987000001 SCOPUS H-INDEX:286 IF: 23.239 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
649.	<p>angioplasty.</p> <p>Thrift, A. G., Ragavan, R. S., Riddell, M. A., Joshi, R., Thankappan, K. R., Chow, C., Oldenburg, B., Mahal, A. S., Kalyanram, K., Kartik, K., Suresh, O., Mini, G. K., Ismail, J., Gamage, D. G., Hasan, A., Srikanth, V. K., Thomas, N., Maulik, P. K., Guggilla, R. K. and Evans, R. G.</p> <p>Hypertension in Rural India: The Contribution of Socioeconomic Position Journal of the American Heart Association; 2020, 9 (7): 38</p> <p>Address: [Thrift, Amanda G.; Ragavan, Rathina Srinivasa; Riddell, Michaela A.; Suresh, Oduru; Ismail, Jordan; Gamage, Dilan Giguruwa; Hasan, Aniqqa] Monash Univ, Monash Hlth, Sch Clin Sci, Melbourne, Vic, Australia. [Mahal, Ajay S.] Monash Univ, Sch Publ Hlth & Preventat Med, Melbourne, Vic, Australia. [Evans, Roger G.] Monash Univ, Biomed Discovery Inst, Cardiovasc Dis Program, Melbourne, Vic, Australia. [Evans, Roger G.] Monash Univ, Dept Physiol, Melbourne, Vic, Australia. [Joshi, Rohina; Chow, Clara] Univ New South Wales, George Inst Global Hlth, Sydney, NSW, Australia. [Thankappan, K. R.; Mini, G. K.] Sree Chitra Tirunal Inst Med Sci & Technol, Achutha Menon Ctr Hlth Sci Studies, Trivandrum, Kerala, India. [Chow, Clara] Westmead Hosp, Dept Cardiol, Sydney, NSW, Australia. [Oldenburg, Brian] Univ Melbourne, Melbourne Sch Populat & Global Hlth, Carlton, Vic, Australia. [Mahal, Ajay S.] Univ Melbourne, Melbourne Sch Populat & Global Hlth, Nossal Inst Global Hlth, Carlton, Vic, Australia. [Kalyanram, Kartik; Kartik, Kamakshi; Suresh, Oduru] Rishi Valley Rural Hlth Ctr, Rishi Valley, Andhra Pradesh, India. [Mini, G. K.] Ananthapuri Hosp & Res Inst, Global Inst Publ Hlth, Trivandrum, Kerala, India. [Srikanth, Velandai K.] Monash Univ, Cent Clin Sch, Peninsula Clin Sch, Frankston, Australia. [Thomas, Nihal] Christian Med Coll & Hosp, Dept Endocrinol Diabet & Metab, Vellore, Tamil Nadu, India. [Maulik, Pallab K.] George Inst Global Hlth, New Delhi, India. [Maulik, Pallab K.] Univ Oxford, George Inst Global Hlth, Oxford, England. [Guggilla, Rama K.] Med Univ Bialystok, Div Dent, Fac Med, Dept Populat Med & Civilizat Dis Prevent, Bialystok, Poland. [Guggilla, Rama K.] Med Univ Bialystok, Div Med Educ English, Bialystok, Poland.</p> <p>Thrift, AG (reprint author), Monash Univ, Monash Med Ctr, Monash Hlth, Epidemiol & Prevent Unit, Sch Clin Sci, Level 5,Block, Melbourne, Vic, Australia. amanda.thrift@monash.edu</p> <p>Background--Various indicators of socioeconomic position (SEP) may have opposing effects on the risk of hypertension in disadvantaged settings. For example, high income may reflect sedentary employment, whereas greater education may promote healthy lifestyle choices. We assessed whether education modifies the association between income and hypertension in 3 regions of South India at different stages of epidemiological transition. Methods and Results--Using a cross-sectional design, we randomly selected villages within each of rural Trivandrum, West Godavari, and Rishi Valley. Sampling was stratified by age group and sex. We measured blood pressure and anthropometry and administered a</p>	INT	JAN TO JUN	Endocrinology	<p>WOS:000527597700024</p> <p>SCOPUS</p> <p>H-INDEX:72</p> <p>IF: 4.660 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	questionnaire to identify lifestyle factors and SEP, including education, literacy, and income. Logistic regression was used to assess associations between various components of SEP and hypertension, and interaction analyses were used to determine whether educational attainment modified the association between income and hypertension. Trivandrum, the region of highest SEP, had the greatest prevalence of hypertension, whereas Rishi Valley, the lowest SEP region, had the least. Overall, greater income was associated with greater risk of hypertension. In interaction analyses, there was no evidence that educational attainment modified the association between income and hypertension. Conclusions--Education is widely considered to ameliorate the risk of hypertension in high-income countries. Why this effect is absent in rural India merits investigation.				
650.	Tilak, M., Paul, A., Srivastava, A., Singh, D., Aboobacker, F. N., Korula, A., Abraham, A., Srivastava, A., Albert, S., Thakkar, P. and David, J. A. Non-Surgical correction of knee flexion deformity in persons with haemophilia-An algorithmic approach Haemophilia; 2020, 26 124-125 Address: [Tilak, Merlyn; Paul, Arun; Srivastava, Anumeha; Singh, Divya; Aboobacker, Fouzia Nambiathayil; Korula, Anu; Abraham, Aby; Srivastava, Alok; Albert, Sandeep; Thakkar, Prince; David, Judy Ann] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India.	INT	JAN TO JUN	Clinical Haematology, Physical Medicine and Rehabilitation	WOS:000536674800229 H-INDEX:88 IF: 3.590 BIOXBIO (2018/2019)
651.	Tolend, M., Majeed, H., Soliman, M., Daruge, P., Bordalo-Rodrigues, M., Dertkigil, S. S. J., Gibikote, S., Keshava, S. N., Stimec, J., Dunn, A., Li, Y. J., Blanchette, V., Lundin, B. and Doria, A. S. Critical appraisal of the International Prophylaxis Study Group magnetic resonance image scale for evaluating haemophilic arthropathy Haemophilia; 2020:10 Address: [Tolend, Mirkamal; Majeed, Haris] Univ Toronto, Inst Med Sci, Toronto, ON, Canada. [Tolend, Mirkamal; Majeed, Haris; Soliman, Magdy; Stimec, Jennifer; Doria, Andrea S.] Univ Toronto, Hosp Sick Children, Dept Diagnost Imaging, Toronto, ON, Canada. [Daruge, Paulo; Bordalo-Rodrigues, Marcelo] Univ Sao Paulo, Inst Radiol, Sao Paulo, SP, Brazil. [Juan Dertkigil, Sergio San] Univ Campinas UNICAMP, Dept Radiol, Sao Paulo, Brazil. [Gibikote, Sridhar; Keshava, Shyamkumar N.] Christian Med Coll & Hosp, Dept Radiol, Vellore, Tamil Nadu, India. [Stimec, Jennifer; Doria, Andrea S.] Univ Toronto, Dept Med Imaging, Toronto, ON, Canada. [Dunn, Amy] Nationwide Childrens Hosp, Dept Hematol, Columbus, OH USA. [Li, Ying-jia] Nanfang Hosp Hosp, Dept Radiol, Guangzhou, Peoples R China. [Blanchette, Victor] Univ Toronto, Hosp Sick Children, Dept Hematol & Oncol, Toronto, ON, Canada. [Lundin, Bjorn] Lund Univ, Skane Univ Hosp, Ctr Med Imaging & Physiol, Lund, Sweden. Doria, AS (reprint author), Univ Toronto, Hosp Sick Children, Dept Diagnost Imaging, Toronto, ON, Canada. andrea.doria@sickkids.ca	INT	JAN TO JUN	Radiology	WOS:000538474300001 SCOPUS H-INDEX:88 IF: 3.590 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	A goal of the International Prophylaxis Study Group (IPSG) is to provide an accurate instrument to measure MRI-based disease severity of haemophilic arthropathy at various time points, so that longitudinal changes in disease severity can be identified to support decisions on treatment management. We review and discuss in this paper the evaluative purpose of the IPSG MRI scale in relation to its development and validation processes so far. We also critically appraise the validity, reliability and responsiveness of using the IPSG MRI scale in different clinical and research settings, and whenever applicable, compare these clinimetric properties of the IPSG MRI scale with those of its precursors, the compatible additive and progressive MRI scales.				
652.	Toms, A. S. and Rai, E. Operative fasting guidelines and postoperative feeding - Current concepts Indian J Anaesth; 2020, 64 (1): 85 Address: Department of Anesthesia, Christian Medical College, Vellore , Tamil Nadu, India.	NAT	JAN TO JUN	Anaesthesia	PMID:32001922 PMC ID: PMC6967365 SCOPUS H-INDEX:26 IF: 0.170 RG (2018/2019)
653.	Totadri, S. Slow and Steady Keeps Them in the Race: Metronomic Therapy in Children With Cancer Indian Pediatr; 2020, 57 (6): 501-502 Address: Pediatric Hematology-Oncology Unit, Department of Pediatrics, Christian Medical College and Hospital, Vellore , India. totadri86@yahoo.com	NAT	JAN TO JUN	Pediatric Hematology Oncology	PMID:32562392 SCOPUS H-INDEX:49 IF: 1.163 BIOXBIO (2018/2019)
654.	Troeger, C. E., Khalil, I. A., Blacker, B. F., Biehl, M. H., Albertson, S. B., Zimsen, S. R. M., Rao, P. C., Abate, D., Admasie, A., Ahmadi, A., Ahmed, Mlcb, Akal, C. G., Alahdab, F., Alam, N., Alene, K. A., Alipour, V., Aljunid, S. M., Al-Raddadi, R. M., Alvis-Guzman, N., Amini, S., Anjomshoa, M., Antonio, C. A. T., Arabloo, J., Aremu, O., Atalay, H. T., Atique, S., Avokpaho, Efga, Awad, S., Awasthi, A., Badawi, A., Balakrishnan, K., Banoub, J. A. M., Barac, A., Bassat, Q., Bedi, N., Bennett, D. A., Bhattacharyya, K., Bhutta, Z. A., Bijani, A., Bills, C. B., Car, J., Carvalho, F., Castaneda-Orjuela, C. A., Causey, K., Christopher, D. J., Cohen, A. J., Dandona, L., Dandona, R., Daryani, A., Demeke, F. M., Djalalinia, S., Dubey, M., Dubljanin, E., Duken, E. E., Zaki, M. E., Endries, A. Y., Fernandes, E., Fischer, F., Frostad, J., Fullman, N., Gardner, W. M., Geta, B., Ghadiri, K., Gorini, G., Goulart, A. C., Guo, Y. M., Hailu, G. B., Haj-Mirzaian, A., Haj-Mirzaian, A., Hamidi, S., Hassen, H. Y., Hoang, C. L., Horita, N., Hostiuc, M., Hussain, Z., Irvani, S. S. N., James, S. L., Jha, R. P., Jonas, J. B., Karch, A., Kasaeian, A., Kassa, T. D., Kassebaum, N. J., Kefale, A. T., Khader, Y. S., Khan, E. A., Khan, G., Khan, M. N., Khang, Y. H., Khoja, A. T., Kimokoti, R. W., Kisa, A., Kisa, S., Kisson, N., Knibbs, L. D., Kochhar, S., Kosen, S., Koul, P. A., Koyanagi, A., Defo, B. K., Kumar, G. A., Lal, D. K., Leshargie, C. T., Lewycka, S., Li, S. S., Lodha, R., Macarayan, E. R. K., Majdan, M., Mamun, A. A., Manguerra, H., Mehta, V., Melese, A., Memish, Z. A., Mengistu, D. T., Meretoja, T. J., Mestrovic, T., Miazgowski, B., Mirrakhimov, E. M., Moazen, B.,	INT	JAN TO JUN	Pulmonary Medicine	WOS:000504005300043 H-INDEX:217 IF: 27.516 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Mohammad, K. A., Mohammed, S., Monasta, L., Moore, C. E., Morawska, L., Mosser, J. F., Mousavi, S. M., Murthy, S., Mustafa, G., Nazari, J., Nguyen, C. T., Nguyen, H. L. T., Nguyen, L. H., Nguyen, S. H., Nielsen, K. R., Nisar, M. I., Nixon, M. R., Ogbo, F. A., Okoro, A., Olagunju, A. T., Olagunju, T. O., Oren, E., Ortiz, J. R., Mahesh, P. A., Pakhale, S., Postma, M. J., Qorbani, M., Quansah, R., Rafiei, A., Rahim, F., Rahimi-Movaghar, V., Rai, R. K., Reitsma, M. B., Rezai, M. S., Rezapour, A., Rios-Blancas, M. J., Ronfani, L., Rothenbacher, D., Rubino, S., Saleem, Z., Sambala, E. Z., Samy, A. M., Milicevic, M. M. S., Sarmiento-Suarez, R., Sartorius, B., Savic, M., Sawhney, M., Saxena, S., Sbarra, A., Seyedmousavi, S., Shaikh, M. A., Sheikh, A., Shigematsu, M., Smith, D. L., Sreeramareddy, C. T., Stanaway, J. D., Sufiyan, M. B., Temsah, M. H., Tessema, B., Tran, B. X., Tran, K. B., Tsadik, A. G., Ullah, I., Updike, R. L., Vasankari, T. J., Veisani, Y., Wada, F. W., Waheed, Y., Welgan, K., Wiens, K. E., Wiysonge, C. S., Yimer, E. M., Yonemoto, N., Zaidi, Z., Zar, H. J., Lim, S. S., Vos, T., Mokdad, A. H., Murray, C. J. L., Kyu, H. H., Hay, S. I., Reiner, R. C. and Infect, G. B. D. Lower Resp</p> <p>Quantifying risks and interventions that have affected the burden of lower respiratory infections among children younger than 5 years: an analysis for the Global Burden of Disease Study 2017 Lancet Infectious Diseases; 2020, 20 (1): 60-79</p> <p>Address: [Khalil, Ibrahim A.; Sartorius, Benn; Smith, David L.; Stanaway, Jeffrey D.; Lim, Stephen S.; Vos, Theo; Mokdad, Ali H.; Murray, Christopher J. L.; Kyu, Hmwe Hmwe; Hay, Simon I.; Reiner, Robert C., Jr.] Univ Washington, Sch Med, Dept Hlth Metr Sci, Seattle, WA USA. [Kassebaum, Nicholas J.] Univ Washington, Dept Anesthesiol & Pain Med, Seattle, WA 98195 USA. [Kochhar, Sonali; Nielsen, Katie R.; Ortiz, Justin R.] Univ Washington, Dept Global Hlth, Seattle, WA 98195 USA. [Nielsen, Katie R.] Univ Washington, Dept Pediat, Seattle, WA 98195 USA. [Troeger, Christopher E.; Khalil, Ibrahim A.; Blacker, Brigitte F.; Biehl, Molly H.; Albertson, Samuel B.; Zimsen, Stephanie R. M.; Rao, Puja C.; Causey, Kate; Cohen, Aaron J.; Dandona, Lalit; Dandona, Rakhi; Frostad, Joseph; Fullman, Nancy; Gardner, William M.; James, Spencer L.; Kassebaum, Nicholas J.; Manguerra, Helena; Mosser, Jonathan F.; Nixon, Molly R.; Reitsma, Marissa Bettay; Sbarra, Alyssa; Smith, David L.; Stanaway, Jeffrey D.; Updike, Rachel L.; Welgan, Katie; Wiens, Kirsten E.; Lim, Stephen S.; Vos, Theo; Mokdad, Ali H.; Murray, Christopher J. L.; Kyu, Hmwe Hmwe; Hay, Simon I.; Reiner, Robert C., Jr.] Univ Washington, Inst Hlth Metr & Evaluat, Seattle, WA 98121 USA. [Oren, Eyal] Univ Washington, Seattle, WA 98195 USA. [Abate, Degu] Haramaya Univ, Dept Med Lab Sci, Harar, Ethiopia. [Wada, Fiseha Wadilo] Wolaita Sodo Univ, Dept Med, Addis Ababa, Ethiopia. [Admasie, Amha] Wolaita Sodo Univ, Sch Publ Hlth, Addis Ababa, Ethiopia. [Ahmadi, Alireza] Kermanshah Univ Med Sci, Dept Anesthesiol, Kermanshah, Iran. [Ghadiri, Keyghobad] Kermanshah Univ Med Sci, Kermanshah, Iran. [Ahmed, Mohamed Lemine Cheikh Brahim] Univ Mohammed 5, Dept Biol, Rabat, Morocco. [Ahmed, Mohamed Lemine Cheikh Brahim] Minist Hlth, Natl Inst Res Publ Hlth, Nouakchott, Mauritania. [Memish, Ziad A.] Minist Hlth, Res Dept, Prince Mohammed Bin Abdulaziz Hosp, Riyadh, Saudi Arabia. [Akai, Chalachew Genet; Demeke, Feleke</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Mekonnen; Melese, Addisu] Bahir Dar Univ, Dept Med Lab Sci, Bahir Dar, Ethiopia. [Alahdab, Fares] Mayo Clin, Fdn Med Educ & Res, Evidence Based Practice Ctr, Rochester, MN USA. [Alam, Noore] Queensland Hlth, Prevent Div, Herston, Qld, Australia. [Tessema, Belay] Univ Gondar, Dept Med Microbiol, Gondar, Ethiopia. [Alene, Kefyalew Addis] Univ Gondar, Inst Publ Hlth, Gondar, Ethiopia. [Alene, Kefyalew Addis] Australian Natl Univ, Res Sch Populat Hlth, Canberra, ACT, Australia. [Alipour, Vahid; Arabloo, Jalal; Rezapour, Aziz] Iran Univ Med Sci, Hlth Management & Econ Res Ctr, Tehran, Iran. [Aljunid, Syed Mohamed] Kuwait Univ, Dept Hlth Policy & Management, Safat, Kuwait. [Aljunid, Syed Mohamed] Natl Univ Malaysia, Int Ctr Casemix & Clin Coding, Bandar Tun Razak, Malaysia. [Al-Raddadi, Rajaa M.] King Abdulaziz Univ, Dept Family & Community Med, Jeddah, Saudi Arabia. [Alvis-Guzman, Nelson] Univ Cartagena, Hlth Econ Res Grp, Cartagena, Colombia. [Alvis-Guzman, Nelson] Univ Costa, Res Grp Hosp Management & Hlth Policies, Barranquilla, Colombia. [Nazari, Javad] Arak Univ Med Sci, Dept Pediat, Arak, Iran. [Amini, Saeed] Arak Univ Med Sci, Hlth Serv Management Dept, Arak, Iran. [Anjomshoa, Mina] Rafsanjan Univ Med Sci, Social Determinants Hlth Res Ctr, Rafsanjan, Iran. [Antonio, Carl Abelardo T.] Univ Philippines Manila, Dept Hlth Policy & Adm, Manila, Philippines. [Macarayan, Erlyn Rachelle King] Univ Philippines Manila, Dev & Commun Studies, Manila, Philippines. [Antonio, Carl Abelardo T.] Hong Kong Polytech Univ, Dept Appl Social Sci, Hong Kong, Peoples R China. [Aremu, Olatunde] Birmingham City Univ, Sch Hlth Sci, Birmingham, W Midlands, England. [Atalay, Hagos Tasew] Aksum Univ, Dept Nursing, Aksum, Ethiopia. [Atique, Suleman] Univ Lahore, Univ Inst Publ Hlth, Lahore, Pakistan. [Atique, Suleman] Univ Hail, Dept Publ Hlth, Hail, Saudi Arabia. [Avokpaho, Euripide F. G. A.] Benin Clin Res Inst, Abomey Calavi, Benin. [Avokpaho, Euripide F. G. A.] Lab Studies & Res Act Hlth, Controle Malad Infect, Porto Novo, Benin. [Awad, Samah] Jordan Univ Sci & Technol, Dept Pediat & Neonatol, Ramtha, Jordan. [Khader, Yousef Saleh] Jordan Univ Sci & Technol, Dept Publ Hlth & Community Med, Ramtha, Jordan. [Awasthi, Ashish] Indian Inst Publ Hlth, Gandhinagar, India. [Awasthi, Ashish; Dandona, Lalit; Dandona, Rakhi; Kumar, G. Anil; Lal, Dharmesh Kumar] Publ Hlth Fdn India, Gurugram, India. [Badawi, Alaa] Publ Hlth Agcy Canada, Publ Hlth Risk Sci Div, Toronto, ON, Canada. [Badawi, Alaa] Univ Toronto, Dept Nutr Sci, Toronto, ON, Canada. [Bhutta, Zulfiqar A.] Univ Toronto, Ctr Global Child Hlth, Hosp Sick Children, Toronto, ON, Canada. [Balakrishnan, Kalpana] Sri Ramachandra Med Coll & Res Inst, Dept Environm Hlth Engn, Chennai, Tamil Nadu, India. [Banoub, Joseph Adel Mattar] Alexandria Univ, Fac Med, Alexandria, Egypt. [Barac, Aleksandra] Clin Ctr Serbia, Clin Infect & Trop Dis, Belgrade, Serbia. [Milicevic, Milena M. Santric] Univ Belgrade, Ctr Sch Publ Hlth & Hlth Management, Belgrade, Serbia. [Barac, Aleksandra; Dubljanin, Eleonora] Univ Belgrade, Fac Med, Belgrade, Serbia. [Bassat, Quique] Univ Barcelona, Barcelona Inst Global Hlth, Barcelona, Spain. [Bassat, Quique; Koyanagi, Ai] Catalan Inst Res & Adv Studies, Barcelona, Spain. [Bedi, Neeraj] Gandhi Med Coll Bhopal, Dept Community Med, Bhopal, India. [Bedi, Neeraj] Jazan Univ, Jazan, Saudi Arabia. [Moore, Catrin E.] Univ Oxford, Big Data Inst, Nuffield Dept Med, Oxford, England. [Lewycka, Sonia] Univ</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Oxford, Ctr Trop Med & Global Hlth, Nuffield Dept Med, Oxford, England. [Bennett, Derrick A.] Univ Oxford, Nuffield Dept Populat Hlth, Oxford, England. [Bhattacharyya, Krittika] Natl Inst Biomed Genom, Dept Stat & Computat Genom, Kalyani, W Bengal, India. [Bhattacharyya, Krittika] Univ Calcutta, Dept Stat, Kolkata, India. [Bhutta, Zulfiqar A.] Aga Khan Univ, Ctr Excellence Women & Child Hlth, Karachi, Pakistan. [Nisar, Muhammad Imran] Aga Khan Univ, Dept Pediat & Child Hlth, Karachi, Pakistan. [Bijani, Ali] Babol Univ Med Sci, Social Determinants Hlth Res Ctr, Babol Sar, Iran. [Bills, Corey B.] Univ Calif San Francisco, Dept Emergency Med, San Francisco, CA 94143 USA. [Bills, Corey B.] Univ Calif San Francisco, Inst Global Hlth Sci, San Francisco, CA 94143 USA. [Car, Josip] Nanyang Technol Univ, Ctr Populat Hlth Sci, Singapore, Singapore. [Car, Josip] Imperial Coll London, Global eHlth Unit, London, England. [Saxena, Sonia] Imperial Coll London, Sch Publ Hlth, London, England. [Carvalho, Felix] Univ Porto, Appl Mol Biosci Unit, Porto, Portugal. [Carvalho, Felix] Univ Porto, Inst Publ Hlth, Porto, Portugal. [Fernandes, Eduarda] Univ Porto, Ctr Excellence Green Chem Chem & Technol Network, Porto, Portugal. [Castaneda-Orjuela, Carlos A.] Natl Inst Hlth, Colombian Natl Hlth Observ, Bogota, Colombia. [Castaneda-Orjuela, Carlos A.] Univ Nacl Colombia, Epidemiol & Publ Hlth Evaluat Grp, Bogota, Colombia. [Christopher, Devasahayam J.] Christian Med Coll & Hosp, Dept Pulm Med, Vellore, Tamil Nadu, India. [Cohen, Aaron J.] Hlth Effects Inst, Boston, MA USA. [Rafiei, Alireza] Mazandaran Univ Med Sci, Dept Immunol, Sari, Iran. [Seyedmousavi, Seyedmojtaba] Mazandaran Univ Med Sci, Invas Fungi Res Ctr, Sari, Iran. [Rafiei, Alireza] Mazandaran Univ Med Sci, Mol & Cell Biol Res Ctr, Sari, Iran. [Rezai, Mohammad Sadegh] Mazandaran Univ Med Sci, Pediat Infect Dis Res Ctr, Sari, Iran. [Daryani, Ahmad] Mazandaran Univ Med Sci, Toxoplasmosis Res Ctr, Sari, Iran. [Djalalinia, Shirin] Minist Hlth & Med Educ, Deputy Res & Technol, Tehran, Iran. [Dubey, Manisha] UN World Food Programme, New Delhi, India. [Duken, Eyasu Ejeta] Wollega Univ, Dept Hlth Sci, Nekemte, Ethiopia. [Duken, Eyasu Ejeta] Jimma Univ, Mycobacteriol Res Ctr, Jimma, Ethiopia. [Zaki, Maysaa El Sayed] Mansoura Univ, Dept Clin Pathol, Mansoura, Egypt. [Endries, Aman Yesuf] St Pauls Hosp Millennium Med Coll, Dept Publ Hlth, Addis Ababa, Ethiopia. [Fischer, Florian] Bielefeld Univ, Dept Publ Hlth Med, Bielefeld, Germany. [Geta, Birhanu] Wollo Univ, Dept Pharm, Dessie, Ethiopia. [Gorini, Giuseppe] Canc Prevent & Res Inst, Occupat & Environm Epidemiol Sect, Florence, Italy. [Goulart, Alessandra C.] Univ Sao Paulo, Univ Hosp, Ctr Clin & Epidemiol Res, Sao Paulo, Brazil. [Goulart, Alessandra C.] Univ Sao Paulo, Dept Internal Med, Sao Paulo, Brazil. [Guo, Yuming; Li, Shanshan] Monash Univ, Sch Publ Hlth & Prevent Med, Melbourne, Vic, Australia. [Guo, Yuming] Zhengzhou Univ, Coll Publ Hlth, Dept Epidemiol & Biostat, Zhengzhou, Henan, Peoples R China. [Hailu, Gessesew Bugssa] Mekelle Univ, Div Biomed Sci, Mekelle, Ethiopia. [Kassa, Tesfaye Dessale] Mekelle Univ, Clin Pharm Unit, Mekelle, Ethiopia. [Mengistu, Desalegn Tadese] Mekelle Univ, Sch Med, Mekelle, Ethiopia. [Tsadik, Afewerki Gebremeskel; Yimer, Ebrahim M.] Mekelle Univ, Sch Pharm, Mekelle, Ethiopia. [Seyedmousavi, Seyedmojtaba] Univ Tehran Med Sci, Ctr Expertise Microbiol, Tehran, Iran. [Mousavi, Seyyed Meysam] Univ Tehran Med Sci, Dept Hlth Management & Econ,</p>				

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	<p>LRI estimates. Methods We used four strategies to model LRI burden: the mortality due to LRIs was modelled using vital registration data, demographic surveillance data, and verbal autopsy data in a predictive ensemble modelling tool; the incidence of LRIs was modelled using population representative surveys, health-care utilisation data, and scientific literature in a compartmental meta-regression tool; the attribution of risk factors for LRI mortality was modelled in a counterfactual framework; and trends in LRI mortality were analysed applying changes in exposure to risk factors over time. In GBD, infectious disease mortality, including that due to LRI, is among HIV-negative individuals. We categorised locations based on their burden in 1990 to make comparisons in the changing burden between 1990 and 2017 and evaluate the relative percent change in mortality rate, incidence, and risk factor exposure to explain differences in the health loss associated with LRIs among children younger than 5 years. Findings In 2017, LRIs caused 808 920 deaths (95% uncertainty interval 747 286-873 591) in children younger than 5 years. Since 1990, there has been a substantial decrease in the number of deaths (from 2 337 538 to 808 920 deaths; 65.4% decrease, 61.5-68.5) and in mortality rate (from 362.7 deaths [3304-392.0] per 100 000 children to 118.9 deaths [109.8-128.3] per 100 000 children; 67.2% decrease, 63.5-70.1). LRI incidence dedined globally (32.4% decrease, 27.2-37.5). The percent change in under-5 mortality rate and incidence has varied across locations. Among the risk factors assessed in this study, those responsible for the greatest decrease in under-5 LRI mortality between 1990 and 2017 were increased coverage of vaccination against Haemophilus influenza type b (11.4% decrease, 0.0-24.5), increased pneumococcal vaccine coverage (6.3% decrease, 6.1-6.3), and reductions in household air pollution (8.4%, 6.8-9.2). Interpretation Our findings show that there have been substantial but uneven declines in LRI mortality among countries between 1990 and 2017. Although improvements in indicators of sociodemographic development could explain some of these trends, changes in exposure to modifiable risk factors are related to the rates of decline in LRI mortality. No single intervention would universally accelerate reductions in health loss associated with LRIs in all settings, but emphasising the most dominant risk factors, particularly in countries with high case fatality, can contribute to the reduction of preventable deaths. Copyright (C) 2019 The Author(s). Published by Elsevier Ltd.</p>				
655.	<p>Troeger, C. E., Khalil, I. A., Blacker, B. F., Biehl, M. H., Albertson, S. B., Zimsen, S. R. M., Rao, P. C., Abate, D., Ahmadi, A., Ahmed, Mlcb, Akal, C. G., Alahdab, F., Alam, N., Alene, K. A., Alipour, V., Aljunid, S. M., Al-Raddadi, R. M., Alvis-Guzman, N., Amini, S., Anber, N. H., Anjomshoa, M., Antonio, C. A. T., Arabloo, J., Aremu, O., Atalay, H. T., Atique, S., Avokpaho, Efga, Awad, S., Awasthi, A., Badawi, A., Balakrishnan, K., Banoub, J. A. M., Barac, A., Bassat, Q., Bedi, N., Bennett, D. A., Bhattacharyya, K., Bhutta, Z. A., Bijani, A., Car, J., Carvalho, F., Castaneda-Orjuela, C. A., Christopher, D. J., Dandona, L., Dandona, R., Daryani, A., Demeke, F. M., Deshpande, A., Djalalinia, S., Dubey, M., Dubljanin, E., Duken, E. E., Zaki, M. E., Endries, A. Y., Fernandes, E.,</p>	INT	JAN TO JUN	Pulmonary Medicine	<p>WOS:000504005300042 H-INDEX:217 IF: 27.516 BIOXBIO (2018/2019)</p>

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	<p>Fischer, F., Fullman, N., Gardner, W. M., Geta, B., Ghadiri, K., Gorini, G., Goulart, A. C., Guo, Y. M., Hailu, G. B., Haj-Mirzaian, A., Haj-Mirzaian, A., Hamidi, S., Hassen, H. Y., Hoang, C. L., Hostiuc, M., Hussain, Z., Irvani, S. S. N., James, S. L., Jha, R. P., Jonas, J. B., Karch, A., Kasaeian, A., Kassa, T. D., Kassebaum, N. J., Kefale, A. T., Khader, Y. S., Khan, E. A., Khan, M. N., Khang, Y. H., Khoja, A. T., Kimokoti, R. W., Kisa, A., Kisa, S., Kissoon, N., Kochhar, S., Kosen, S., Koyanagi, A., Defo, B. K., Kumar, G. A., Lal, D. K., Leshargie, C. T., Li, S. S., Lodha, R., Macarayan, E. R. K., Majdan, M., Mamun, A. A., Manguerra, H., Melese, A., Memish, Z. A., Mengistu, D. T., Meretoja, T. J., Mestrovic, T., Miazgowski, B., Mirrakhimov, E. M., Moazen, B., Mohammad, K. A., Mohammed, S., Monasta, L., Moore, C. E., Mosser, J. F., Mousavi, S. M., Murthy, S., Mustafa, G., Nazari, J., Nguyen, C. T., Nguyen, L. H., Nisar, M. I., Nixon, M. R., Ogbo, F. A., Okoro, A., Olagunju, A. T., Olagunju, T. O., Mahesh, P. A., Pakhale, S., Postma, M. J., Qorbani, M., Quansah, R., Rafiei, A., Rahim, F., Rahimi-Movaghar, V., Rai, R. K., Rezai, M. S., Rezapour, A., Rios-Blancas, M. J., Ronfani, L., Rosettie, K., Rothenbacher, D., Safari, S., Saleem, Z., Sambala, E. Z., Samy, A. M., Milicevic, M. M. S., Sartorius, B., Sawhney, M., Seyedmousavi, S., Shaikh, M. A., Sheikh, A., Shigematsu, M., Smith, D. L., Soriano, J. B., Sreeramareddy, C. T., Stanaway, J. D., Sufiyan, M. B., Teklu, T. G. E., Temsah, M. H., Tessema, B., Tran, B. X., Tran, K. B., Ullah, I., Updike, R. L., Vasankari, T. J., Veisani, Y., Wada, F. W., Waheed, Y., Weaver, M., Wiens, K. E., Wiysonge, C. S., Yimer, E. M., Yonemoto, N., Zaidi, Z., Zar, H. J., Zarghi, A., Lim, S. S., Vos, T., Mokdad, A. H., Murray, C. J. L., Kyu, H. H., Hay, S. I., Reiner, R. C. and Dis, G. B. D. Diarrhoeal Quantifying risks and interventions that have affected the burden of diarrhoea among children younger than 5 years: an analysis of the Global Burden of Disease Study 2017 Lancet Infectious Diseases; 2020, 20 (1): 37-59</p> <p>Address: [Troeger, Christopher E.; Khalil, Ibrahim A.; Blacker, Brigitte F.; Biehl, Molly H.; Albertson, Samuel B.; Zimsen, Stephanie R. M.; Rao, Puja C.; Dandona, Lalit; Dandona, Rakhi; Deshpande, Aniruddha; Fullman, Nancy; Gardner, William M.; James, Spencer L.; Kassebaum, Nicholas J.; Manguerra, H.; Mosser, Jonathan F.; Nixon, Molly R.; Rosettie, Katherine; Smith, David L.; Stanaway, Jeffrey D.; Updike, Rachel L.; Weaver, Marcia; Wiens, Kirsten E.; Lim, Stephen S.; Vos, Theo; Mokdad, Ali H.; Murray, Christopher J. L.; Kyu, Hmwe Hmwe; Hay, Simon I.; Reiner, Robert C., Jr.] Univ Washington, Inst Hlth Metr & Evaluat, Seattle, WA 98121 USA. [Khalil, Ibrahim A.; Sartorius, Benn; Smith, David L.; Stanaway, Jeffrey D.; Weaver, Marcia; Lim, Stephen S.; Vos, Theo; Mokdad, Ali H.; Murray, Christopher J. L.; Kyu, Hmwe Hmwe; Hay, Simon I.; Reiner, Robert C., Jr.] Univ Washington, Sch Med, Dept Hlth Metr Sci, Seattle, WA USA. [Kassebaum, Nicholas J.] Univ Washington, Dept Anesthesiol & Pain Med, Seattle, WA 98195 USA. [Kochhar, Sonali] Univ Washington, Dept Global Hlth, Seattle, WA 98195 USA. [Abate, Degu] Haramaya Univ, Dept Med Lab Sci, Harar, Ethiopia. [Ahmadi, Alireza] Kermanshah Univ Med Sci, Dept Anesthesiol, Kermanshah, Iran. [Ghadiri, Keyghobad] Kermanshah Univ Med Sci, Kermanshah, Iran. [Ahmed, Mohamed Lemine Cheikh Brahim] Univ Mohammed 5, Dept Biol, Rabat, Morocco. [Ahmed, Mohamed Lemine Cheikh</p>				

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	<p>Monika] Univ N Carolina, Dept Publ Hlth Sci, Charlotte, NC USA. [Sheikh, Aziz] Univ Edinburgh, Usher Inst Populat Hlth Sci & Informat, Edinburgh, Midlothian, Scotland. [Shigematsu, Mika] Natl Inst Infect Dis, Tokyo, Japan. [Soriano, Joan B.] Autonomous Univ Madrid, Hosp Univ Princesa, Madrid, Spain. [Soriano, Joan B.] Inst Hlth Carlos III, Ctr Invest Red Enfermedades Resp, Madrid, Spain. [Sreeramareddy, Chandrashekhar T.] Int Med Univ, Div Community Med, Kuala Lumpur, Malaysia. [Temsah, Mohamad-Hani] King Saud Univ, Dept Pediat, Riyadh, Saudi Arabia. [Bach Xuan Tran] Hanoi Med Univ, Dept Hlth Econ, Hanoi, Vietnam. [Khanh Bao Tran] Univ Auckland, Mol Med & Pathol, Auckland, New Zealand. [Khanh Bao Tran] Mil Med Univ, Clin Hematol & Toxicol, Hanoi, Vietnam. [Ullah, Irfan] Gomal Univ, Gomal Ctr Biochem & Biotechnol, Dera Ismail Khan, Pakistan. [Ullah, Irfan] Mufti Mehmood Mem Teaching Hosp, TB Culture Lab, Dera Ismail Khan, Pakistan. [Vasankari, Tommi Juhani] UKK Inst, Tampere, Finland. [Veisani, Yousef] Ilam Univ Med Sci, Psychosocial Injuries Res Ctr, Ilam, Iran. [Wada, Fiseha Wadilo] Wolaita Sodo Univ, Dept Med, Wolaita Sodo, Ethiopia. [Wada, Fiseha Wadilo] Addis Ababa Univ, Dept Microbial Cellular & Mol Biol, Addis Ababa, Ethiopia. [Waheed, Yasir] Fdn Univ, Fdn Univ Med Coll, Rawalpindi, Pakistan. [Wiysonge, Charles Shey] Stellenbosch Univ, Dept Global Hlth, Cape Town, South Africa. [Yonemoto, Naohiro] Natl Ctr Neurol & Psychiat, Dept Psychopharmacol, Tokyo, Japan. [Zaidi, Zoubida] Univ Hosp Setif, Dept Epidemiol, Setif, Algeria. [Zar, Heather J.] Univ Cape Town, Dept Paediat & Child Hlth, Cape Town, South Africa. Reiner, RC (reprint author), Univ Washington, Inst Hlth Metr & Evaluat, Seattle, WA 98121 USA. bcreiner@uw.edu</p> <p>Background Many countries have shown marked declines in diarrhoea! disease mortality among children younger than 5 years. With this analysis, we provide updated results on diarrhoeal disease mortality among children younger than 5 years from the Global Burden of Diseases, Injuries, and Risk Factors Study 2017 (GBD 2017) and use the study's comparative risk assessment to quantify trends and effects of risk factors, interventions, and broader sociodemographic development on mortality changes in 195 countries and territories from 1990 to 2017. Methods This analysis for GBD 2017 had three main components. Diarrhoea mortality was modelled using vital registration data, demographic surveillance data, and verbal autopsy data in a predictive, Bayesian, ensemble modelling tool; and the attribution of risk factors and interventions for diarrhoea were modelled in a counterfactual framework that combines modelled population-level prevalence of the exposure to each risk or intervention with the relative risk of diarrhoea given exposure to that factor. We assessed the relative and absolute change in diarrhoea mortality rate between 1990 and 2017, and used the change in risk factor exposure and sociodemographic status to explain differences in the trends of diarrhoea mortality among children younger than 5 years. Findings Diarrhoea was responsible for an estimated 533 768 deaths (95% uncertainty interval 477 162-593 145) among children younger than 5 years globally in 2017,</p>				

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	<p>a rate of 78.4 deaths (70.1-87.1) per 100 000 children. The diarrhoea mortality rate ranged between countries by over 685 deaths per 100 000 children. Diarrhoea mortality per 100 000 globally decreased by 69.6% (63.1-74.6) between 1990 and 2017. Among the risk factors considered in this study, those responsible for the largest declines in the diarrhoea mortality rate were reduction in exposure to unsafe sanitation (13.3% decrease, 11.2-15.5), childhood wasting (9.9% decrease, 9.6-10.2), and low use of oral rehydration solution (6.9% decrease, 4-8-8-4). Interpretation Diarrhoea mortality has declined substantially since 1990, although there are variations by country. Improvements in sociodemographic indicators might explain some of these trends, but changes in exposure to risk factors-particularly unsafe sanitation, childhood growth failure, and low use of oral rehydration solution-appear to be related to the relative and absolute rates of decline in diarrhoea mortality. Although the most effective interventions might vary by country or region, identifying and scaling up the interventions aimed at preventing and protecting against diarrhoea that have already reduced diarrhoea mortality could further avert many thousands of deaths due to this illness. Copyright (C) 2019 The Author(s). Published by Elsevier Ltd.</p>				
656.	<p>Turkina, A., Wang, J. X., Mathews, V., Saydam, G., Jung, C. W., Al Hashmi, H. H., Yassin, M., Le Clanche, S., Miljkovic, D., Slader, C. and Hughes, T. P. TARGET: a survey of real-world management of chronic myeloid leukaemia across 33 countries British Journal of Haematology; 2020:8</p> <p>Address: [Turkina, Anna] Natl Res Ctr Hematol, Moscow, Russia. [Wang, Jianxiang] Chinese Acad Med Sci, Inst Hematol, Tianjin, Peoples R China. [Wang, Jianxiang] Chinese Acad Med Sci, Blood Dis Hosp, Tianjin, Peoples R China. [Wang, Jianxiang] Peking Union Med Coll, Tianjin, Peoples R China. [Mathews, Vikram] Christian Med Coll & Hosp, Dept Haematol, Vellore, Tamil Nadu, India. [Saydam, Guray] Ege Univ Hosp, Dept Hematol, Bornova, Turkey. [Jung, Chul Won] Samsung Med Ctr, Seoul, South Korea. [Al Hashmi, Hani Hassan] King Fahad Specialist Hosp, Oncol Ctr, Adult Hematol & Hematopoiet Stem Cell Transplant, Dammam, Saudi Arabia. [Yassin, Mohamed] Natl Ctr Canc Care & Res, Doha, Qatar. [Le Clanche, Solenn] KPL, 7 Rue Filles Calvaire, F-75003 Paris, France. [Miljkovic, Darko; Slader, Cassandra] Novartis Pharma AG, Novartis Hematol Emerging Growth Markets, Basel, Switzerland. [Hughes, Timothy P.] South Australian Hlth & Med Res Inst, Adelaide, SA, Australia. Le Clanche, S (reprint author), KPL, 7 Rue Filles Calvaire, F-75003 Paris, France. solenn.leclanche@kpl-paris.com</p> <p>Despite the availability of guidelines for the management of chronic myeloid leukaemia (CML), various issues may prevent their successful implementation. The TARGET survey examined real-world management of CML patients compared with international recommendations. This online survey was completed in 2017. Results were discussed by a Steering Committee (SC) of eight international</p>	NAT	JAN TO JUN	Clinical Haematology	<p>WOS:000522299800001 SCOPUS H-INDEX:179 IF: 5.206 BIOXBIO (2018/2019)</p>

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	haematologists, challenges were identified and practical solutions developed. Of the 1008 haematologists invited (33 countries), 614 completed the survey. Gaps regarding treatment efficacy and molecular monitoring were identified. Half of the physicians did not perform three-monthly testing of during the initial 12 months of treatment, citing cost as the major barrier, although they know it should be done. Treatment-free remission was not considered a primary treatment goal or as a priority factor influencing treatment decisions. European Leukemia Net guidelines interpretation was generally acceptable, but awareness regarding management of persistent adverse events was poor. Practical solutions proposed by the SC were mostly focused on enhancing physician education and awareness, or encouraging hospitals to work with the government, in order to improve the quality of BCR-ABL testing. Gaps in current CML management were identified compared with international recommendations, which the proposed practical solutions would help to address.				
657.	<p>Turkina, A., Wang, J., Mathews, V., Saydam, G., Jung, C. W., Al Hashmi, H. H., Yassin, M., Le Clanche, S., Miljkovic, D., Slader, C. and Hughes, T. P.</p> <p>TARGET: a survey of real-world management of chronic myeloid leukaemia across 33 countries</p> <p>Br J Haematol; 2020, 190 (6): 869-876</p> <p>Address: National Research Center for Hematology, Moscow, Russia. Institute of Hematology and Blood Disease Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Tianjin, China. Department of Haematology, Christian Medical College, Vellore, India. Department of Hematology, Ege University Hospital, Bornova Izmir, Turkey. Samsung Medical Center, Seoul, Korea. Adult Hematology & Hematopoietic Stem Cell Transplant Department, Oncology Center, King Fahad Specialist Hospital, Dammam, KSA, Saudi Arabia. National Center for Cancer Care and Research, Doha, Qatar. KPL, Paris, France. Novartis Hematology Emerging Growth Markets, Novartis Pharma AG, Basel, Switzerland. South Australian Health and Medical Research Institute, Adelaide, SA, Australia.</p> <p>Despite the availability of guidelines for the management of chronic myeloid leukaemia (CML), various issues may prevent their successful implementation. The TARGET survey examined real-world management of CML patients compared with international recommendations. This online survey was completed in 2017. Results were discussed by a Steering Committee (SC) of eight international haematologists, challenges were identified and practical solutions developed. Of the 1008 haematologists invited (33 countries), 614 completed the survey. Gaps regarding treatment efficacy and molecular monitoring were identified. Half of the physicians did not perform three-monthly testing of during the initial 12 months of treatment, citing cost as the major barrier, although they know it should be done. Treatment-free remission was not considered a primary treatment goal or as a</p>	INT	JUL TO DEC	Hematology	PMID:32227648

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	priority factor influencing treatment decisions. European Leukemia Net guidelines interpretation was generally acceptable, but awareness regarding management of persistent adverse events was poor. Practical solutions proposed by the SC were mostly focused on enhancing physician education and awareness, or encouraging hospitals to work with the government, in order to improve the quality of BCR-ABL testing. Gaps in current CML management were identified compared with international recommendations, which the proposed practical solutions would help to address.				
658.	<p>Tyagi, A. K., Kurien, M., Irodi, A., Varghese, A. M., Holla, S. J. and Thomas, R. Meet the Lacrimal Sac: Endoscopic Surgeons' Road Map Indian Journal of Otolaryngology and Head and Neck Surgery; 2020, Address: Department of ENT, All India Institute of Medical Sciences, Rishikesh, Uttarakhand 249 203, India Department of ENT, Pondicherry Institute of Medical Sciences, Puducherry, India Department of Radiology, Christian Medical College, Vellore, Tamil Nadu, India Department of ENT, Christian Medical College, Vellore, Tamil Nadu, India Department of Anatomy, Christian Medical College, Vellore, Tamil Nadu, India</p> <p>Knowledge of lateral nasal wall landmarks in relation to lacrimal apparatus is essential for successful endoscopic dacryocystorhinostomy. This descriptive study of right and left sagittally sectioned ten adult cadaver head specimens was done measuring various lateral nasal wall anatomical landmarks including lacrimal apparatus with digital calipers. Maxillary line was identified in 75%, majority overlapping lacrimal sac. Genu of middle turbinate was at or posterior to nasolacrimal duct. Mean distance of superior end of sac was 8.88 mm above axilla, between its anterior edge and axilla was 10.58 mm and its length was 11.72 mm. Considering above measurements, 'Rule of 10' can be applied for nasal mucosal incision. A "Three Tier Approach" to overcome mucosal (nasal), bony (lacrimal and frontal process of maxilla) and mucosal (sac) boundaries exposes lacrimal sac up to its inferior limit ensuring successful endonasal endoscopic dacryocystorhinostomy. © 2020, Association of Otolaryngologists of India.</p>	NAT	JAN TO JUN	Radiology, ENT, Anatomy	<p>SCOPUS H-INDEX:19 IF: 0.110 RG (2018/2019)</p>
659.	<p>Udhayachandhar, R., Otokwala, J., Korula, P. J., Rymbai, M., Chandu, T. T. and Joseph, P. Perioperative factors impacting intensive care outcomes following Whipple procedure: A retrospective study Indian J Anaesth; 2020, 64 (3): 216-221</p> <p>Address: Division of Critical Care, CMC Hospital, Vellore, Tamil Nadu, India. Intensive Care Unit, Department of Anaesthesiology, University of Portharcourt, Porthar Court, Nigeria. Department of Hepatobiliary Surgery, CMC Hospital, Vellore, Tamil Nadu, India. Department of Anaesthesia, CMC Hospital, Vellore, Tamil Nadu, India.</p>	NAT	JAN TO JUN	Hepatobiliary Surgery, Critical Care Unit, Anaesthesia	<p>PMID:32346169 PMC ID: PMC7179786 SCOPUS H-INDEX:26 IF: 0.170 RG (2018/2019)</p>

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	BACKGROUND AND AIMS: Whipple procedure is associated with perhaps the most perioperative morbidity and mortality amongst surgical procedures. Current data regarding their ICU profile and outcomes are lacking. Thus, in the present study, we aimed to determine perioperative factors affecting patient-centred outcomes following the Whipple procedure. METHODS: In a cohort of patients undergoing pylorus-sparing pancreaticoduodenectomies, we strove to determine perioperative variables that may impact outcomes. Unfavourable outcomes (composite of mortality, prolonged ICU stay of more than 14 days or ICU readmission) of patients who underwent the procedure were recorded and logistic regressions analysis of significant variables conducted. RESULTS: Around 68 patients recruited over a 20-month period which included 57 males (83.8%); mean age was 53.4(±11.2) with mean acute physiology and chronic health evaluation (APACHE) II score 12.5 (±6.1). Nineteen patients remained intubated at the end of procedures (27.9%). Median ICU stay was 2 days (IQR 2-3). Unfavourable ICU outcomes were 14 in number (20.6%) and 2 (2.9%) hospital deaths occurred. Pulmonary complications occurred in 12 patients (17.7%) and non-pulmonary complications occurred in 41 patients (60.3%). In a multiple logistic regression analysis, the APACHE score 1.34 (1.09-1.64) and pulmonary complications 17.3 (2.1-145) were variables that were identified as predictors of unfavourable outcomes. CONCLUSION: The APACHE II score may reliably predict adverse outcomes following Whipple procedure. Although non-pulmonary complications are common, pulmonary complications in these patients adversely impact patient outcomes				
660.	Valmiki, R. R., Venkatesalu, S., Chacko, A. G., Prabhu, K., Thomas, M. M., Mathew, V., Yoganathan, S., Muthusamy, K., Chacko, G., Vanjare, H. A. and Krothapalli, S. B. Phosphoproteomic analysis reveals Akt isoform-specific regulation of cytoskeleton proteins in human temporal lobe epilepsy with hippocampal sclerosis Neurochemistry International; 2020, 134 17 Address: [Valmiki, Rajesh Ramann; Venkatesalu, Subhashini; Krothapalli, Srinivasa Babu] Christian Med Coll & Hosp , Dept Neurol Sci, Neurophysiol Lab, Vellore 632004, Tamil Nadu, India. [Chacko, Ari George; Prabhu, Krishna] Christian Med Coll & Hosp , Dept Neurol Sci, Neurosurg, Vellore 632004, Tamil Nadu, India. [Thomas, Maya Mary; Yoganathan, Sangeetha; Muthusamy, Karthik] Christian Med Coll & Hosp , Dept Pediat Neurol, Vellore 632004, Tamil Nadu, India. [Mathew, Vivek] Christian Med Coll & Hosp , Dept Neurol Sci, Neurol, Vellore 632004, Tamil Nadu, India. [Chacko, Geeta] Christian Med Coll & Hosp , Dept Gen Pathol, Neuropathol, Vellore 632004, Tamil Nadu, India. [Vanjare, Harshad Arvind] Christian Med Coll & Hosp , Dept Radiol, Vellore 632004, Tamil Nadu, India. Valmiki, RR (reprint author), Christian Med Coll & Hosp , Dept Neurol Sci, Neurophysiol Lab, Vellore 632004, Tamil Nadu, India. rajeshvalmiki@cmcvellore.ac.in	INT	JAN TO JUN	Neurological Sciences, Neurosurgery, Pediatric Neurology, General Pathology, Neuropathology	WOS:000518704200005 SCOPUS H-INDEX:117 IF: 3.994 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Akt is one of the most important downstream effectors of phosphatidylinositol 3-kinase/mTOR pathway. Hyperactivation and expression of this pathway are seen in a variety of neurological disorders including human temporal lobe epilepsy with hippocampal sclerosis (TLE-HS). Nevertheless, the expression and activation profiles of the Akt isoforms, Akt1, Akt2, and Akt3 and their functional roles in human TLE-HS have not been studied. We examined the protein expression and activation (phosphorylation) patterns of Akt and its isoforms in human hippocampal tissue from TLE and non-TLE patients. A phosphoproteomic approach followed by interactome analysis of each Akt isoform was used to understand protein-protein interactions and their role in TLE-HS pathology. Our results demonstrated activation of the Akt/mTOR pathway as well as activation of Akt downstream substrates like QGSK3 beta, mTOR, and S6 in TLE-HS samples. Akt1 isoform levels were significantly increased in the TLE-HS samples as compared to the non-TLE samples. Most importantly, different isoforms were activated in different TLE-HS samples, Akt2 was activated in three samples, Akt2 and Akt1 were simultaneously activated in one sample and Akt3 was activated in two samples. Our phosphoproteomic screen across six TLE-HS samples identified 183 proteins phosphorylated by Akt isoforms, 29 of these proteins belong to cytoskeletal modification. Also, we were able to identify proteins of several other classes involved in glycolysis, neuronal development, protein folding and excitatory amino acid transport functions as Akt substrates. Taken together, our data offer clues to understand the role of Akt and its isoforms in underlying the pathology of TLE-HS and further, modulation of Akt/mTOR pathway using Akt isoforms specific inhibitors may offer a new therapeutic window for treatment of human TLE-HS.</p>				
661.	<p>Valson, A. T., Sahay, M., Prasad, N., Agarwal, S. K., Varughese, S. and Gang, S. KDIGO 2017 Clinical Practice Guideline Update for the Diagnosis, Evaluation, Prevention and Prevention of Chronic Kidney Disease-Mineral and Bone Disorder (CKD-MBD): Indian Commentary Indian J Nephrol; 2020, 30 (4): 221-233 Address: Department of Nephrology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Nephrology, Osmania Medical College, Hyderabad, Telangana, India. Department of Nephrology, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, Uttar Pradesh, India. Department of Nephrology, All India Institute of Medical Sciences, New Delhi, India. Department of Nephrology, Muljibhai Patel Urological Hospital, Nadiad, Gujarat, India.</p>	NAT	JUL TO DEC	Nephrology	<p>PMID:33273784 PMC ID:7699661</p>
662.	<p>Van Balen, E. C., O'mahony, B., Cnossen, M. H., Blanchette, V., Fischer, K., Iorio, A., Jackson, S., Coffin, D., Skinner, M., Srivastava, A., Van Der Bom, J. G., Gouw, S. C. and</p>	INT	JAN TO JUN	Clinical Haematology	<p>WOS:000536674800102 H-INDEX:88</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Haemovalue, Steeringcomm International Standard Set of Health Outcomes that matter for people living with hemophilia Haemophilia; 2020, 26 60-61</p> <p>Address: [van Balen, Erna C.] Leiden Univ, Dept Clin Epidemiol, Med Ctr, Leiden, Netherlands. [O'Mahony, Brian] Trinity Coll Dublin, Irish Haemophilia Soc, Dublin, Ireland. [Cnossen, Marjon H.] Erasmus Univ, Med Ctr, Sophia Childrens Hosp, Dept Pediat Hematol, Rotterdam, Netherlands. [Blanchette, Victor] Univ Toronto, Dept Pediat, Toronto, ON, Canada. [Blanchette, Victor] Hosp Sick Children, Div Hematol Oncol, Toronto, ON, Canada. [Fischer, Kathelijn] Univ Med Ctr Utrecht, Van Creveldklin, Dept Hematol, Utrecht, Netherlands. [Iorio, Alfonso] McMaster Univ, Dept Hlth Res Methods Evidence & Impact, Dept Med, Hamilton, ON, Canada. [Jackson, Shannon] St Pauls Hosp, British Columbia Prov Bleeding Disorders Program, Adult Div, Vancouver, BC, Canada. [Coffin, Donna] World Federat Haemophilia, Montreal, PQ, Canada. [Skinner, Mark] Natl Hemophilia Fdn, New York, NY USA. [Skinner, Mark] Inst Policy Adv Ltd, Washington, DC USA. [Srivastava, Alok] Christian Med Coll & Hosp, Dept Haematol, Vellore, Tamil Nadu, India. [van der Bom, Johanna G.] Leiden Univ, Med Ctr, Dept Clin Epidemiol, Leiden, Netherlands. [van der Bom, Johanna G.] Sanquin Res, Ctr Clin Transfus Res, Leiden, Netherlands. [HaemoValue Steeringcomm] Univ Amsterdam, Med Ctr, Emma Childrens Hosp, Dept Pediat Hematol, Amsterdam Univ, Amsterdam, Netherlands.</p>				IF: 3.590 BIOXBIO (2018/2019)
663.	<p>Vanbalen, E., O'mahony, B., Cnossen, M. H., Dolan, G., Blanchette, V., Fischer, K., Gue, D., O'hara, J., Iorio, A., Jackson, S., Konkle, B. A., Nugent, D., Coffin, D., Pierce, G., Skinner, M., Smit, C., Srivastava, A., Vaneennaam, F., Van Derbom, J. and Gouw, S. International Standard Set Of Health Outcomes That Matter For People Living With Hemophilia Haemophilia; 2020, 26 119-119</p> <p>Address: [vanBalen, E.; Smit, C.; van derBom, J.; Gouw, S.] LUMC, Clin Epidemiol, Leiden, Netherlands. [O'Mahony, B.] Irish Haemophilia Soc, Dublin, Ireland. [Cnossen, M. H.] Erasmus MC, Sophia Childrens Hosp, Dept Paediat Haematol, Rotterdam, Netherlands. [Dolan, G.] St Thomas Hosp, Ctr Haemostasis & Thrombosis, London, England. [Blanchette, V.] Hosp Sick Children, Dept Pediat, Toronto, ON, Canada. [Fischer, K.] Univ Med Ctr Utrecht, Dept Haematol, Van Creveldklin, Utrecht, Netherlands. [Gue, D.] St Pauls Hosp, British Columbia Prov Bleeding Disorders Program, Adult Div, Vancouver, BC, Canada. [O'Hara, J.] Univ Chester, Fac Hlth & Social Care, Chester, Cheshire, England. [Iorio, A.] McMaster Univ, Dept Med, Dept Hlth Res Methods Evidence & Impact, Hamilton, ON, Canada. [Jackson, S.] St Pauls Hosp, British Columbia Prov Bleeding Disorders Program, Adult Div, Vancouver, BC, Canada. [Konkle, B. A.] Univ Washington, Dept Med, Bloodworks Northwest, Seattle, WA USA. [Nugent, D.] Univ Calif Irvine, Orange, CA 92668 USA. [Nugent, D.] Univ Calif Irvine, Childrens Hosp, Ctr Inherited Blood</p>	INT	JAN TO JUN	Clinical Haematology	<p>WOS:000509655000201 H-INDEX:88 IF: 3.590 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Disorders, Orange, CA 92668 USA. [Coffin, D.; Pierce, G.] World Federat Haemophilia, Montreal, PQ, Canada. [Skinner, M.] Natl Hemophilia Fdn, New York, NY USA. [Srivastava, A.] Christian Med Coll & Hosp, Dept Haematol, Vellore, Tamil Nadu, India. [vanEennaam, F.] Decis Grp, Amsterdam, Netherlands.				
664.	<p>Vanjare, H. A., Selvi, B. T., Karuppusami, R., Manesh, A., Gunasekaran, K., Prabhakar, A. T., Mannam, P. and Jasper, A. Clinical and radiologic findings of acute necrotizing encephalopathy in young adults American Journal of Neuroradiology; 2020, 41 (12): 2250-2254 Address: Christian Medical College and Hospital, Tamil Nadu, India</p> <p>Acute necrotizing encephalopathy after an acute febrile illness, although initially described exclusively in the pediatric age group, has been recently shown to have an adult onset as well. In this study, we describe 10 patients (16 years of age or older) with acute necrotizing encephalopathy. In our study, bilateral thalamic involvement with the trilaminar pattern of diffusion restriction on MR imaging was the predominant finding seen in all of the patients reviewed. Ancillary findings of cerebral white matter, brain stem, and cerebellum involvement with sparing of the basal ganglia were also noted. A poorer outcome was observed in patients with a higher degree of thalamic involvement. The cause of an underlying infection was identified in 4 patients (dengue in 3 and influenza in 1). Overall, a sizeable portion of young adults with acute necrotizing encephalopathy have shown a poorer outcome, with dengue being an important underlying trigger in an endemic region. © 2020 American Society of Neuroradiology. All rights reserved.</p>	INT	JUL TO DEC	Neurological Sciences	SCOPUS
665.	<p>Varghese, G. M. The Search for Effective Empiric Therapy for Acute Undifferentiated Febrile Illness Clin Infect Dis; 2020, Address: Department of Infectious Diseases, Christian Medical College, Vellore, India.</p>	INT	JUL TO DEC	Infectious Diseases	PMID: 32991696
666.	<p>Varghese, G. M. and John, R. COVID-19 in India: Moving from containment to mitigation Indian J Med Res; 2020, 151 (2 & 3): 136-139 Address: Department of Infectious Diseases, Christian Medical College, Vellore 632 004, Tamil Nadu, India.</p>	NAT	JAN TO JUN	Infectious Disease	PMID:32317412 SCOPUS H-INDEX:81 IF: 1.251 BIOXBIO (2018/2019)
667.	<p>Varghese, G. M., John, R., Manesh, A., Karthik, R. and Abraham, O. C. Authors' response The Indian journal of medical research; 2020, 152 (1 & 2): 151-152 Address: Department of Infectious Diseases, Christian Medical College, Vellore 632 004, Tamil Nadu, India. Department of General Medicine & Infectious Diseases, Christian Medical College, Vellore 632 004, Tamil Nadu, India.</p>	NAT	JUL TO DEC	Infectious Diseases, General Medicine	PMID:32883920 PMC ID:7853270
668.	<p>Varghese, G. M., John, R., Manesh, A., Karthik, R. and Abraham, O. C. Clinical management of COVID-19</p>	NAT	JUL TO DEC	Infectious Diseases, General Medicine	PMID:32611911 PMC ID:7530435

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>The Indian journal of medical research; 2020, 151 (5): 401-410</p> <p>Address: Department of Infectious Diseases, Christian Medical College, Vellore, Tamil Nadu, India. Department of General Medicine & Infectious Diseases, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>The novel coronavirus disease 2019 (COVID-19) with its early origin from Wuhan city in China has evolved into a global pandemic. Maximal precautionary measures and resources have been put forward by most nations in war footing to mitigate transmission and decrease fatality rates. This article was aimed to review the evidence on clinical management and to deal with the identification of high-risk groups, warning signs, appropriate investigations, proper sample collection for confirmation, general and specific treatment measures, strategies as well as infection control in the healthcare settings. Advanced age, cardiovascular disease, diabetes, hypertension and cancer have been found to be the risk factors for severe disease. Fever lasting for >five days with tachypnoea, tachycardia or hypotension are indications for urgent attention and hospitalization in a patient with suspected COVID-19. At present, reverse transcription-polymerase chain reaction (RT-PCR) from the upper respiratory tract samples is the diagnostic test of choice. While many drugs have shown in vitro activity against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), there are insufficient clinical data to promote or dissuade their usage. Among the currently available drugs, hydroxychloroquine and lopinavir/ritonavir may be considered for patients with severe COVID-19 infection, awaiting further clinical trials. Stringent droplet and contact precautions will protect healthcare workers against most clinical exposures to COVID-19.</p>				
669.	<p>Varghese, J., James, J. V., Anand, R., Narayanasamy, M., Rebekah, G., Ramakrishna, B., Nellickal, A. J. and Jacob, M.</p> <p>Development of insulin resistance preceded major changes in iron homeostasis in mice fed a high-fat diet J Nutr Biochem; 2020, 84 108441</p> <p>Address: Department of Biochemistry, Christian Medical College, Vellore 632002, Tamil Nadu, India. Electronic Address: joevarghese@cmcvellore.ac.in. Department of Biochemistry, Christian Medical College, Vellore 632002, Tamil Nadu, India. Department of Biostatistics, Christian Medical College, Vellore 632002, Tamil Nadu, India. Department of Pathology, Christian Medical College, Vellore 632002, Tamil Nadu, India. Department of Clinical Biochemistry, Christian Medical College, Vellore 632002, Tamil Nadu, India(3). Department of Biochemistry, Christian Medical College, Vellore 632002, Tamil Nadu, India. Electronic Address: mjacob@cmcvellore.ac.in.</p> <p>Type 2 diabetes mellitus (T2DM) and insulin resistance (IR) have been associated</p>	INT	JUL TO DEC	Biochemistry, Biostatistics, Pathology, Clinical Biochemistry	PMID: 32629238 PMC:7115812

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	with dysregulation of iron metabolism. The basis for this association is not completely understood. To attempt to investigate this, we studied temporal associations between onset of insulin resistance (IR) and dysregulated iron homeostasis, in a mouse model of T2DM. Male C57Bl/6 mice (aged 8 weeks) were fed a high-fat diet (HFD; 60% energy from fat) or a control diet (CD; 10% energy from fat) for 4, 8, 12, 16, 20 and 24 weeks. Development of IR was documented, and various metabolic, inflammatory and iron-related parameters were studied in these mice. HFD-feeding induced weight gain, hepato-steatosis and IR in the mice. Onset of IR occurred from 12 weeks onwards. Hepatic iron stores progressively declined from 16 weeks onwards. Accompanying changes included a decrease in hepatic hepcidin (Hamp1) mRNA expression and serum hepcidin levels and an increase in iron content in the epididymal white adipose tissue (eWAT). Iron content in the liver negatively correlated with that in the eWAT. Factors known to regulate hepatic Hamp1 expression (such as serum iron levels, systemic inflammation, and bone marrow-derived erythroid regulators) were not affected by HFD-feeding. In conclusion, the results show that the onset of IR in HFD-fed mice preceded dysregulation of iron homeostasis, evidence of which were found both in the liver and visceral adipose tissue.				
670.	<p>Varghese, J., James, J. V., Karthikeyan, M., Rasalkar, K., Raghavan, R., Sukumaran, A., Premkumar, P. S., Eapen, C. E. and Jacob, M. Iron homeostasis is dysregulated, but the iron-hepcidin axis is functional, in chronic liver disease Journal of Trace Elements in Medicine and Biology; 2020, 58 9</p> <p>Address: [Varghese, Joe; James, Jithu Varghese; Karthikeyan, Mathuravalli; Rasalkar, Kavita; Raghavan, Ramya; Sukumaran, Abitha; Jacob, Molly] Christian Med Coll & Hosp, Dept Biochem, Vellore 632002, Tamil Nadu, India. [Premkumar, Prasanna S.] Christian Med Coll & Hosp, Dept Biostat, Vellore 632002, Tamil Nadu, India. [Eapen, C. E.] Christian Med Coll & Hosp, Wellcome Trust Res Lab, Vellore 632002, Tamil Nadu, India. [Eapen, C. E.] Christian Med Coll & Hosp, Dept Gastroenterol & Hepatol, Vellore 632002, Tamil Nadu, India. [Sukumaran, Abitha] Cincinnati Childrens Hosp Med Ctr, Div Oncol, Cincinnati, OH 45229 USA. Jacob, M (reprint author), Christian Med Coll & Hosp, Dept Biochem, Vellore 632002, Tamil Nadu, India. mjacob@cmcvellore.ac.in</p> <p>Background: Perturbations in iron homeostasis have been reported to be associated with irreversible liver injury in chronic liver disease (CLD). However, it is not clear whether liver dysfunction per se underlies such dysregulation or whether other factors also contribute to it. This study attempted to examine the issues involved. Methods: Patients diagnosed to have chronic liver disease (n = 63), who underwent a medically-indicated upper gastrointestinal endoscopy, were the subjects of this study. Patients with dyspepsia, who underwent such a procedure, and were found to have no endoscopic abnormalities, were used as control subjects</p>	INT	JAN TO JUN	Biochemistry, Biostatistics, Wellcome Research Unit, Gastroenterology and Hepatology	<p>WOS:000524409400001 SCOPUS H-INDEX:66 IF: 2.895 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	(n = 49). Duodenal mucosal samples were obtained to study mRNA and protein levels of duodenal proteins involved in iron absorption. A blood sample was also obtained for estimation of hematological, iron-related, inflammatory and liver function-related parameters. Results: Patients with CLD had impaired liver function, anemia of inflammation and lower serum levels of hepcidin than control subjects. Gene (mRNA) expression levels of duodenal ferroportin and duodenal cytochrome b (proteins involved in iron absorption) were decreased, while that of divalent metal transporter-1 (DMT-1) was unchanged. Protein expression of DMT-1 was, however, decreased while that of ferroportin was unchanged. In the CLD group, serum hepcidin was predicted independently by serum ferritin and hemoglobin, but not by C-reactive protein (a marker of inflammation). CLD patients with serum ferritin greater than 300 μ g/dL had significantly greater liver dysfunction (as indicated by significantly higher serum concentrations of bilirubin, AST and ALT, and MELD scores), higher serum concentrations of CRP and hepcidin, and higher ferroportin protein expression, than those with serum ferritin \leq 300 μ g/dL. Conclusions: In patients with CLD, anemia of inflammation and low serum hepcidin levels were found to paradoxically co-exist. Expression of duodenal proteins involved in iron absorption were either decreased or unaltered in these patients. The hepcidin response to higher body iron levels and/or inflammation appeared to be functional in these patients, despite the presence of liver disease.				
671.	Varghese, L., Cherian, L. M. and Varghese, G. M. Actinomycosis: An Unusual Cause of Maxillary Sinusitis Ear Nose Throat J; 2020, 145561320965207 Address: Department of Otorhinolaryngology, Christian Medical College, Vellore, India. Department of Infectious Diseases, Christian Medical College, Vellore, India.	INT	JUL TO DEC	Otorhinolaryngology, Infectious Diseases	PMID: 33048586
672.	Varghese, L., Laxmanan, S. and Varghese, G. M. Mucosal Leishmaniasis Due to Leishmania donovani-A Rare Presentation Ear Nose Throat J; 2020, 145561320952186 Address: Department of Otorhinolaryngology, Christian Medical College, Vellore, India. The Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences, Christian Medical College, Vellore, India. Department of Infectious Diseases, Christian Medical College, Vellore, India.	INT	JUL TO DEC	Otorhinolaryngology, The Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences, Infectious Diseases	PMID: 32853039
673.	Varghese, L., Philip, A., Suryawanshi, M. K. and Job, A. Eosinophilic Otitis Media-An Otitis Media Mandating a Different Outlook Ear Nose Throat J; 2020, 145561320947269 Address: Department of Otorhinolaryngology, Christian Medical College, Vellore, Tamil Nadu, India. Department of Pathology, Christian Medical College, Vellore, Tamil Nadu, India.	INT	JUL TO DEC	Otorhinolaryngology, Pathology	PMID: 32744905
674.	Varghese, R. and Veeraraghavan, B. Decoding the Penicillin Resistance of Streptococcus pneumoniae for Invasive and Noninvasive Infections	INT	JUL TO DEC	Clinical Microbiology	PMID: 32996825

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Microb Drug Resist; 2020, Address: Department of Clinical Microbiology, Christian Medical College, Vellore, India.</p> <p>This commentary explains the reasons for the extensive variations in pneumococcal penicillin resistance based on a literature review of pneumococcal penicillin-binding proteins, the pharmacodynamics and pharmacokinetics of beta-lactams, the risk factors associated with mortality, laboratory issues and challenges, including identification, susceptibility testing, and clinical reporting, and the management of invasive and noninvasive Streptococcus pneumoniae infections.</p>				
675.	<p>Varghese, R., Neeravi, A., Subramanian, N., Baskar, P., Anandhan, K. and Veeraraghavan, B.</p> <p>Analysis of Amino Acid Sequences of Penicillin-Binding Proteins 1a, 2b, and 2x in Invasive Streptococcus pneumoniae Nonsusceptible to Penicillin Isolated from Children in India</p> <p>Microb Drug Resist; 2020, Address: Department of Clinical Microbiology, Christian Medical College and Hospital, Vellore, India.</p> <p>Department of Child Health, Christian Medical College and Hospital, Vellore, India.</p> <p>Penicillin-binding proteins are the primary targets for beta lactam drugs, which are main stay of treatment for Streptococcus pneumoniae. The emergence of increased penicillin resistance in meningeal isolates of S. pneumoniae in India is alarming. With this background, we aimed to analyze the pbp gene mutations of penicillin nonsusceptible pneumococcal (PNSP) isolates from within India and their association with international clones. A total of 32 PNSP invasive isolates with a penicillin minimal inhibitory concentrations (MIC) of ≥ 0.12 $\mu\text{g}/\text{mL}$ were subjected to PCR and sequencing for multilocus sequence typing and the pbp genes (pbp2b, pbp2x, and pbp1a). The S. pneumoniae R6 susceptible strain was used as the reference for the comparison analyses. In the majority of the present study isolates, amino acid substitutions were only seen in one of the three active sites of one of the three pbp genes. Thus, pbp genes in the absence of the major substitutions usually associated with penicillin resistance combined with mosaicism in pbp1a resulted in a slight increase in the penicillin MIC to between 0.06 and 2.0 $\mu\text{g}/\text{mL}$, which according to meningeal break point denote resistance. Clonal analyses revealed that the emergence of PNSP in India is due to the gradual expansion of the resistant clones CC320, CC230, and CC63.</p>	INT	JUL TO DEC	Clinical Microbiology, Child Health	PMID: 32716253
676.	<p>Varughese, S., Agarwal, S. K., Raju, T. R. and Khanna, T.</p> <p>Options of Renal Replacement Therapy in CKDu</p> <p>Indian J Nephrol; 2020, 30 (4): 261-263</p> <p>Address: Professor and Head of Nephrology, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>Professor and Head of Nephrology, All India Institute of Medical Sciences, New Delhi, India.</p>	NAT	JUL TO DEC	Nephrology	PMID:33273791 PMC ID:7699668

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Dr. N.T.R. University of Health Sciences, Vijayawada, Andhra Pradesh, India. Division of NCD, Indian Council of Medical Research (ICMR), New Delhi, India.</p> <p>Patients with advanced Chronic Kidney Disease of Unknown origin (CKDu) need to plan for renal replacement therapy. The patients usually affected are probably best served with living-related renal transplantation. Potential donors from the same area are possibly at risk for developing CKDu and need close monitoring post kidney donation. Peritoneal dialysis (PD) is probably a better option as hemodialysis (HD) centers are located in urban areas only and patients have the convenience of receiving therapy at home. The "PD first" pilot project of Sri Lanka is a unique initiative that trains community physicians to offer PD to patients with advanced CKDu. In Telengana and Andhra Pradesh, the Aarogyasri insurance scheme provides for poor patients to avail of free HD and transplantation in government and private hospitals. Much more needs to be done to care for all those who are affected. A public-private partnership model for providing comprehensive care to patients with advanced CKDu can be undertaken in all areas affected by CKDu that makes renal replacement therapy (RRT) available and accessible, irrespective of financial and social limitations.</p>				
677.	<p>Vasan, S. K., Antonisamy, B., Gowri, M., Selliah, H. Y., Geethanjali, F. S., Jebasingh, F. S., Paul, T. V., Thomas, N., Karpe, F., Johnson, M., Osmond, C. and Fall, C. H. D. Prevalence, incidence and predictors of cardiovascular risk factors: longitudinal data from rural and urban South India and comparison with global data BMJ Open Diabetes Res Care; 2020, 8 (1): Address: Oxford Centre for Diabetes, Endocrinology and Metabolism, University of Oxford, Oxford, UK senthil.vasan@ocdem.ox.ac.uk. MRC Lifecourse Epidemiology Unit, University of Southampton, Southampton, Hampshire, UK. Department of Biostatistics, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. Department of Clinical Biochemistry, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. Department of Endocrinology, Diabetes and Metabolism, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. Oxford Centre for Diabetes, Endocrinology and Metabolism, University of Oxford, Oxford, UK. INTRODUCTION: India has high mortality rates from cardiovascular disease (CVD). Understanding the trends and identifying modifiable determinants of CVD risk factors will guide preventive strategies and policy making. RESEARCH DESIGN AND METHODS: CVD risk factors (obesity, central obesity, and type 2 diabetes (T2D), hypertension, hypercholesterolemia and hypertriglyceridemia) prevalence and incidence were estimated in 962 (male 519) non-migrant adults from Vellore, South India, studied in: (1) 1998-2002 (mean age 28.2 years) and (2) 2013-2014 (mean age 41.7 years). Prevalence was compared with the Non-Communicable</p>	INT	JUL TO DEC	Biostatistics, Clinical Biochemistry, Endocrinology, Diabetes and Metabolism	PMID: 33093130 PMC:7583064

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Disease Risk Collaboration (global) data. Incidence was compared with another Indian cohort from New Delhi Birth Cohort (NDBC). Regression analysis was used to test baseline predictors of incident CVD risk factors. RESULTS: The prevalence at 28 and 42 years was 17% (95% CI 14% to 19%) and 51% (95% CI 48% to 55%) for overweight/obesity, 19% (95% CI 17% to 22%) and 59% (95% CI 56% to 62%) for central obesity, 3% (95% CI 2% to 4%) and 16% (95% CI 14% to 19%) for T2D, 2% (95% CI 1% to 3%) and 19% (95% CI 17% to 22%) for hypertension and 15% (95% CI 13% to 18%) and 30% (95% CI 27% to 33%) for hypertriglyceridemia. The prevalence of T2D at baseline and follow-up and hypertension at follow-up was comparable with or exceeded that in high-income countries despite lower obesity rates. The incidence of most risk factors was lower in Vellore than in the NDBC. Waist circumference strongly predicted incident T2D, hypertension and hypertriglyceridemia. CONCLUSIONS: A high prevalence of CVD risk factors was evident at a young age among Indians compared with high and upper middle income countries, with rural rates catching up with urban estimates. Adiposity predicted higher incident CVD risk, but the prevalence of hypertension and T2D was higher given a relatively low obesity prevalence. Preventive efforts should target both rural and urban India and should start young.				
678.	<p>Vasudevan, K., Ragupathi, N. K. D., Jacob, J. J. and Veeraraghavan, B. Highly accurate-single chromosomal complete genomes using IonTorrent and MinION sequencing of clinical pathogens Genomics; 2020, 112 (1): 545-551</p> <p>Address: [Vasudevan, Karthick; Ragupathi, Naveen Kumar Devanga; Jacob, Jobin John; Veeraraghavan, Balaji] Christian Med Coll & Hosp, Dept Clin Microbiol, Vellore 632004, Tamil Nadu, India. Veeraraghavan, B (reprint author), Christian Med Coll & Hosp, Dept Clin Microbiol, Vellore 632004, Tamil Nadu, India. vbalaji@cmcvellore.ac.in</p> <p>Oxford Nanopore MinION sequencing technology has been gaining immense importance in identification of pathogen and antimicrobial resistance, though with 10-15% error rate. Short read technologies generates high accurate genome but with multiple fragments of genome. This study proposes a novel workflow to reduce the indels resulted from MinION long read sequencing by overlaying short read sequences from IonTorrent in the clinical isolates. Best of both techniques were employed which generated highly accurate-single chromosomal microbial genomes with increase in completeness of genomes from 44.5%, 30% and 43% to 98.6%, 98.6% and 96.6% for P. aeruginosa, A. veronii and B. pertussis respectively. To the best of our knowledge, this is the first study to generate a hybrid of IonTorrent and MinION reads to obtain single chromosomal genomes. This would enable to precisely infer both structural arrangement of genes and SNP based analysis for phylogenetic information.</p>	INT	JAN TO JUN	Clinical Microbiology	<p>WOS:000506628500059 SCOPUS H-INDEX:139 IF: NA</p>
679.	Veeraraghavan, B., Bakthavatchalam, Y. D. and Sahni, R. D.	INT	JUL TO DEC	Clinical Microbiology	PMID:33306184

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Orally Administered Amoxicillin/Clavulanate: Current Role in Outpatient Therapy Infect Dis Ther; 2020, Address: Department of Clinical Microbiology, Christian Medical College, Vellore, India. vbalaji@cmcvellore.ac.in.</p> <p>Department of Clinical Microbiology, Christian Medical College, Vellore, India.</p> <p>Oral amoxicillin/clavulanate is a community workhorse antibiotic, routinely prescribed for respiratory tract infections, skin infections as well as urinary tract infections (UTIs). Multiple adult and paediatric dose formulations of amoxicillin/clavulanate are available in different parts of the world. In adult formulations, clavulanic acid dose is restricted to 125 mg because of tolerability issues. Despite its popular use for 40 years, few pharmacokinetic/pharmacodynamic (PK/PD) studies were undertaken to justify the doses and breakpoints currently in use for various infections. Clavulanate has a minimal role in the combination's use for respiratory infections. In the context of rising extended spectrum beta-lactamase (ESBL) prevalence globally, empirical and overuse of orally administered amoxicillin/clavulanate may select resistance in Gram-negative pathogens. The susceptibility test methods and interpretive criteria differ between the Clinical and Laboratory Standards Institute (CLSI) and European Committee on Antimicrobial Susceptibility Testing (EUCAST). Third-generation oral cephalosporins such as ceftibuten or cefpodoxime can be combined with amoxicillin/clavulanate to tackle UTIs involving ESBL producing Escherichia coli and Klebsiella spp. Clinicians who routinely prescribe amoxicillin/clavulanate in outpatient settings should be aware of potential benefits and limitations of this combination.</p>				WOS:000597778600001
680.	<p>Velavan, J.</p> <p>A family physician's journey in exploring sexual health perceptions and needs in a boarding school community</p> <p>J Family Med Prim Care; 2020, 9 (1): 395-401</p> <p>Address: Department of Distance Education, Christian Medical College, Vellore, Tamil Nadu, India.</p> <p>INTRODUCTION AND CONTEXT: Sexual health in schools is neglected in most developing countries,[[1]] however, it is emerging as a major need of the hour. This article captures the author's experience as a family physician in a boarding school setting in India highlighting the need and possible solutions pertaining to sexual health in the school community. SETTING: An international boarding school in India with approximately 600 students, 500 teachers, and administrators who lived on the school campus and 500 support staff who lived off-campus. MATERIALS AND METHODS: Three events prodded the author to explore perceptions and needs pertaining to sexual health in the school community. Being a difficult area of inquiry, this was done as informal qualitative research by dialoguing with six groups of people in the school community: School counselors, parents, student supervisors such as teachers, advisors and dorm parents, school administrators,</p>	NAT	JAN TO JUN	Distance Education	<p>PMID:32110625</p> <p>PMC ID: PMC7014837</p> <p>H-INDEX:NA</p> <p>IF: 0.210 RG (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	support staff, and the students and the responses were collated. OBSERVATIONS: A mere 17.9% of grade 5 to 12 students, of age-groups 10 to 19 never had a conversation with their parents about sexuality. Students were largely ignorant or misinformed on most sexuality-related issues but engaged well when offered anonymity or safe space. Though all stakeholders in the school agreed that students needed an age-appropriate, gender and culture-sensitive, scientific and comprehensive sex education, parental responses were mixed. CONCLUSION: The author's journey as a family physician in a school setting has prompted exploration of a wholistic model for the provision of comprehensive sexual health in schools and the emerging role of a family physician in schools.				
681.	<p>Velayutham, P., Adhikary, S. D., Job, V., Babu, K. S., Rajshekhar, V., Chacko, A. G. and Mets, B.</p> <p>Perioperative hypertension associated neurohumoral stress response in craniotomy patients: Effects of β-blocker and angiotensin converting enzyme inhibitor</p> <p>Interdisciplinary Neurosurgery: Advanced Techniques and Case Management; 2020, 19</p> <p>Address: Neurophysiology Unit, Department of Neurological Sciences, Christian Medical College, Vellore, 632004, India Department of Anesthesiology, Penn State College of Medicine, Milton S. Hershey Medical Center, 500 University Drive, H187, Hershey, PA 17033-0850, United States Department of Clinical Biochemistry, Christian Medical College, Vellore, 632004, India Department of Neurological Sciences, Christian Medical College, Vellore, 632004, India</p> <p>Background: Development of perioperative hypertension in craniotomy procedures is commonly associated with activation of sympathetic events through renin-angiotensin-aldosterone system (RAAS). Preemptive therapy with β-blockers or angiotensin converting enzyme (ACE) inhibitors may attenuate this hypertensive response. We conducted a randomized, double blind; placebo controlled study to compare the effect of β-blocker (atenolol) and an ACE inhibitor (Lisinopril) on perioperative hypertension in patients undergoing for the craniotomy and also studied biochemical markers of these two systems. Methods: Eighty-five patients undergoing craniotomy for supratentorial tumor removal were screened and randomized into three groups to receive either (atenolol; lisinopril or placebo). Blood analysis of renin, aldosterone, norepinephrine and sodium levels was drawn 12 h prior to surgery, at the time of dural opening, and at the time of extubation. Differences in mean arterial pressure (MAP), hear rate (HR) and biochemical markers between three groups were analyzed using one-way ANOVA. Results: Perioperative hemodynamic changes were highly associated with</p>	INT	JAN TO JUN	Neurophysiology Unit, Clinical Biochemistry, Neurological Sciences	<p>SCOPUS H-INDEX:6 IF: 0.140 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	biochemical markers in all the three groups. Specifically, HR was significantly attenuated by atenolol in the immediate extubation period (p < 0.01) persisted till 12 h postoperatively and this was associated with low plasma renin levels at the extubation. MAP was lowered by lisinopril and both aldosterone and norepinephrine levels were significantly lower (p < 0.01) at dural incision and extubation periods. Conclusions: Pretreatment with atenolol or lisinopril significantly attenuated perioperative hypertension in patients undergoing craniotomy procedures. Lisinopril was better in lowering perioperative MAP while atenolol attenuated HR changes. RAAS inhibition may be the possible mechanism responsible for this hypertension effect in craniotomy procedures. © 2019				
682.	<p>Vellore Dasarathan, L., Gaikwad, P. and Telugu, R. B. Disseminated mycobacterial septicemia presented as acute abdomen: a surgeon's perspective on Landouzy's sepsis BMJ case reports; 2020, 13 (12): Address: Department of General Surgery, Christian Medical College and Hospital, Vellore, India vdmlokesh@gmail.com. Department of General Surgery, Christian Medical College and Hospital, Vellore, India. Department of General Pathology, Christian Medical College and Hospital, Vellore, India.</p> <p>A 20-year-old man presented in emergency with fever, abdominal pain and obstipation. On evaluation, he was found to have an acute abdomen with septic shock. The cross-sectional abdominal imaging revealed hepatosplenomegaly, pleural effusion and ascites with retroperitoneal lymphadenopathy. He was resuscitated and started on broad-spectrum antibiotics. There was no other source of infection identified elsewhere. While bacterial and fungal cultures were negative, the sputum, blood, bone marrow and ascitic fluid were positive for Mycobacterium tuberculosis following which he was started on antituberculosis therapy. Despite therapy, the patient's clinical condition continued to deteriorate requiring critical care. In view of Landouzy's sepsis, pulse steroid therapy was started. However, the patient's clinical condition continued to deteriorate and developed systemic inflammatory response syndrome and multi-organ dysfunction syndrome. Despite the best efforts, the patient expired.</p>	INT	JUL TO DEC	General Surgery, General Pathology	PMID: 33298490 PMC:7733078
683.	<p>Vengadavaradan, A. and Subramanian, K. Surges and dips of estrogen: A case of Catamenial epilepsy with post-hysterectomy psychosis Asian Journal of Psychiatry; 2020, 53 Address: [Vengadavaradan, Ashvini; Subramanian, Karthick] Jawaharlal Inst Postgrad Med Educ & Res JIPMER, Dept Psychiat, Pondicherry, India. [Vengadavaradan, Ashvini] Christian Med Coll & Hosp, Child & Adolescent Psychiat, Vellore, Tamil Nadu, India. [Subramanian, Karthick] Sri Balaji Vidyapeeth Deemed To Be Univ, Mahatma Gandhi Med Coll, Pondicherry, India. [Subramanian, Karthick] Sri Balaji Vidyapeeth Deemed To Be Univ, Res Inst MGMC&RI, Pondicherry, India. Vengadavaradan, A (corresponding author), Jawaharlal Inst Postgrad Med Educ &</p>	INT	JUL TO DEC	Child and Adolescent Psychiatry	WOS:000595918300045

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	Res JIPMER, Dept Psychiat, Pondicherry, India.; Vengadavaradan, A (corresponding author), Christian Med Coll & Hosp , Child & Adolescent Psychiat, Vellore, Tamil Nadu, India. ashvensab@gmail.com; karthick.jipmer@gmail.com				
684.	Venkatesan, V., Srinivasan, S., Babu, P. and Thangavel, S. Manipulation of Developmental Gamma-Globin Gene Expression: an Approach for Healing Hemoglobinopathies Mol Cell Biol; 2020, 41 (1): Address: Centre for Stem Cell Research (CSCR), InStem Bengaluru, Christian Medical College, Vellore , Tamil Nadu, India. Manipal Academy of Higher Education, Manipal, Karnataka, India. Centre for Stem Cell Research (CSCR), InStem Bengaluru, Christian Medical College, Vellore , Tamil Nadu, India sthangavel@cmcvellore.ac.in. β -Hemoglobinopathies are the most common monogenic disorders, and a century of research has provided us with a better understanding of the attributes of these diseases. Allogenic stem cell transplantation was the only potentially curative option available for these diseases until the discovery of gene therapy. The findings on the protective nature of fetal hemoglobin in sickle cell disease (SCD) and thalassemia patients carrying hereditary persistence of fetal hemoglobin (HPFH) mutations has given us the best evidence that the cure for β -hemoglobinopathies remains hidden in the hemoglobin locus. The detailed understanding of the developmental gene regulation of gamma-globin (γ -globin) and the emergence of gene manipulation strategies offer us the opportunity for developing a γ -globin gene-modified autologous stem cell transplantation therapy. In this review, we summarize different therapeutic strategies that reactivate fetal hemoglobin for the gene therapy of β -hemoglobinopathies.	INT	JUL TO DEC	Centre for Stem Cell Research	PMID: 33077498
685.	Victor, C., Hazra, D. and Abhilash, K. P. P. Spectrum of Bull Gore Injuries Presenting to the Emergency Department: Our 2-Year Experience from a Tertiary Care Hospital in South India Indian Journal of Surgery; 2020:6 Address: [Victor, Coelho] CMC, Dept Gen Surg, Vellore 632004, Tamil Nadu, India. [Hazra, Darpanarayan; Abhilash, Kundavaram Paul Prabhakar] CMC, Dept Emergency Med, Vellore 632004, Tamil Nadu, India. Hazra, D (reprint author), CMC, Dept Emergency Med, Vellore 632004, Tamil Nadu, India. vvcoelho.m07@gmail.com ; drdarpahazra@gmail.com ; kppabhilash@gmail.com Bull gore injuries are one of the leading causes of morbidity and mortality in rural India, where people make their living rearing live stalk. There is also a significant rise in bull gore injuries following the festival of "Jallikattu" celebrated in southern India. This study was done to improve the understanding of the mode, severity and outcome of such victims. We conducted a retrospective descriptive analysis of victims suffering from bull gore injuries presenting to our Emergency Department	NAT	JAN TO JUN	Emergency Medicine	WOS:000531133000006 SCOPUS H-INDEX:19 IF: 0.550 BIOXBIO (2018/2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	(ED), from January 2017 to December 2018. During the study period, a total of 129 patients, with a mean age of 42.10 years, presented to the ED. There was a male predominance noted of 71.3%. According to our ED triage protocol, majority of the victims (60.5%) were triaged to priority 2. Most of the priority 1 patients suffered mild to moderate head injury or penetrating trauma to abdomen or thorax or both. Perineal injuries were noted in 11 patients, and visceral injuries (liver, kidney, spleen, bowel) were seen in 4 patients. The trauma specialities that were involved were trauma-general surgery 49 (38%), orthopaedics 30 (23.2%), plastic surgery 21 (16.3%), neurosurgery 19 (14.8%), and cardiothoracic surgery 11 (8.5%). About one third (32.6%) required hospital admission, and 60.5% of the victims were discharged from the ED after receiving primary care. Overall 21.8% victims had to undergo major surgical interventions. There was only one fatality and the rest were discharged in a stable condition. Management of bull gore injury is a challenge that requires multidisciplinary and well-coordinated approach for a successful outcome.				
686.	Vijayakumar, S., Wattal, C., J, K. O., Bhattacharya, S., Vasudevan, K., Anandan, S., Walia, K. and Veeraraghavan, B. Insights into the complete genomes of carbapenem-resistant <i>Acinetobacter baumannii</i> harbouring bla (OXA-23,) bla (OXA-420) and bla (NDM-1) genes using a hybrid-assembly approach Access Microbiol; 2020, 2 (8): acmi000140 Address: Christian Medical College, Vellore, India. Sir Ganga Ram Hospital, New Delhi, India. Tata Medical Center, Kolkata, India. Indian Council of Medical Research, New Delhi, India. Carbapenem resistance in <i>Acinetobacter baumannii</i> is due to bla (OXA-23), which is endemic in India. Recently, the sporadic presence of bla (OXA-58) as well as the occurrence of dual carbapenemases were observed. The mobility as well as the dissemination of these resistance genes were mainly mediated by various mobile genetic elements. The present study was aimed at characterizing the genetic arrangement of bla (OXA-23,) bla (NDM-1) and bla (OXA-58) identified in two complete genomes of carbapenem-resistant <i>A. baumannii</i> (CRAB). Complete genomes obtained using a hybrid-assembly approach revealed the accurate arrangement of Tn2006 with bla (OXA-23,) ISAb125 with bla (NDM) and ISAb3 with bla (OXA-58.) In addition, the association of IntI1 integrase with the bla (CARB-2) gene and several virulence factors required for type-IV pili assembly, motility and biofilm formation have been identified. The current study provided deeper insight into the complete characterization of insertion sequences and transposons associated with the carbapenem-resistant genes using short reads of IonTorrent PGM and long reads of MinIon in <i>A. baumannii</i> .	INT	JUL TO DEC	Clinical Microbiology	PMID: 32974602 PMC:7497828
687.	Vilvanathan, S., Kuppuswamy, B. and Sahajanandan, R. A randomized control trial to compare thoracic epidural with intercostal block plus intravenous morphine infusion for postoperative analgesia in patients undergoing	INT	JAN TO JUN	Anaesthesiology	SCOPUS H-INDEX:24 IF: 0.66 RG (2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>elective thoracotomy Annals of Cardiac Anaesthesia; 2020, 23 (2): 127-133</p> <p>Address: Department of Cardiothoracic Anaesthesiology, Sree Chitra Tirunal Institute for Medical Sciences, Trivandrum, Kerala, India Department of Anaesthesiology, Christian Medical College Hospital, Vellore, Tamil Nadu, India</p> <p>Objective: The objective of the study is to compare the efficacy of Thoracic epidural with Intercostal block plus intravenous morphine infusion for postoperative analgesia in patients undergoing elective thoracotomy. Methodology and Design: This study is designed as a prospective randomized clinical trial. Setting: Christian Medical College Hospital, Vellore, India. Participants: Patients undergoing elective thoracic surgery through posterolateral thoracotomy. Intervention: In Group A (TEA) patients epidural catheter was inserted at T5-6 level before induction of GA and analgesia was activated using 0.25% of bupivacaine towards the end of the surgery, before chest closure and infusion of 0.1% bupivacaine with 2 mcg/ml of fentanyl was started. In Group B (ICN) patients, an intercostal blockade of the 5 intercostal spaces was performed by the surgeon just before chest closure using 0.25% bupivacaine and a continuous intravenous morphine infusion of 0.015-0.02 mg/kg/hr was started. Measurements: Assessment of resting and dynamic pain intensity using Numerical rating scale and sedation using Ramsay sedation scale was done and recorded at 1, 6,12,18,24 hours during the first postoperative day. The other parameters that were measured include side effects and the requirement of rescue analgesia. Results: Resting and Dynamic (NRS) pain scores were less in Group A (TEA) than Group B (ICN). In the first 12 hours, the differences in both the resting (P = 0.0505) and dynamic (P = 0.0307) pain scores were statistically significant. By the end of the first postoperative day, sedation scores were more or less similar in both groups. The incidence of side effects and requirement of rescue analgesia were found to be similar in both the groups. Conclusion: To summarize, though the results show a slightly better quality of analgesia with the thoracic epidural, the difference being clinically insignificant intercostal blockade could be considered as a valid alternative. © 2020 Annals of Cardiac Anaesthesia IF: Published by Wolters Kluwer-Medknow.</p>				
688.	<p>Vinod, E., Jefferson, T. E., Amirtham, S. M., Prince, N., Geevar, T., Rebekah, G., Ramasamy, B. and Kachroo, U. Correlation between synovial fluid calcium containing crystal estimation and varying grades of osteoarthritis created using a rabbit model: Potential diagnostic tool J Clin Orthop Trauma; 2020, 11 (Suppl 4): S506-S511</p> <p>Address: Department of Physiology, Christian Medical College, Vellore, Tamil Nadu 632002, India</p>	INT	JAN TO JUN	Physiology, Centre for Stem Cell Research, Transfusion Medicine and Immunohematology, Biostatistics	<p>PMID: 32774019 PMC:7394792 SCOPUS H-INDEX:47 IF: 1.719 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Centre for Stem Cell Research, Christian Medical College, Vellore, Tamil Nadu 632002, India Department of Transfusion Medicine and Immunohematology, Christian Medical College, Vellore, Tamil Nadu 632004, India Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu 632002, India Department of Orthopaedics, Royal Darwin Hospital, 105 Rocklands Drive, Tiwi NT, 0810, Australia</p> <p>Objectives: Accurate diagnosis of osteoarthritis (OA) is the first important step in ensuring appropriate management of the disease. A multitude of tests involving assessment of biomarkers help in assessment of severity and grading of osteoarthritic damage. However, most tests are time consuming and are limited by the paucity in synovial fluid volume. In majority of OA effusions, calcium containing crystals are found. The aim of our study was to evaluate whether a correlation existed between the amount of calcium containing crystals present in synovial fluid and severity scoring of OA to propose a quick and inexpensive technique for disease assessment. Materials and methods: Monosodium-iodoacetate was used to induce high- and low-grade knee OA in adult New Zealand white rabbits (n = 6 joint each group). At 16 weeks, synovial fluid and joints were harvested for histopathological analysis. OA grading was established based on OARSI scoring. Synovial fluid calcium crystal count was assessed by light microscopy (Alizarin red) and confirmed by Fluo-4, AM imaging and polarized microscopy. Statistical analysis was performed using unpaired Student t-test and Pearson correlation. Results and conclusion: The clumps counted in low-grade OA were significantly lower than high-grade OA, in addition to showing a positive correlation (coefficient: 0.65; P=0.021) between calcium crystal count and the grade of OA created. Fluo-4, AM staining, and polarized microscopy were indicative of calcium pyrophosphate dihydrate crystals. This is the first study to suggest that Alizarin red could serve as an effective and rapid, bed-side method for screening and assessing disease progression. © 2020 Delhi Orthopedic Association</p>				
689.	<p>Vinod, E., Kachroo, U., Amirtham, S. M., Ramasamy, B. and Sathishkumar, S. Comparative analysis of fresh chondrocytes, cultured chondrocytes and chondroprogenitors derived from human articular cartilage Acta Histochemica; 2020, 122 (1): 6</p> <p>Address: [Vinod, Elizabeth; Kachroo, Upasana; Amirtham, Soosai Manickam; Sathishkumar, Solomon] Christian Med Coll & Hosp, Dept Physiol, Vellore 632002, Tamil Nadu, India. [Vinod, Elizabeth] Christian Med Coll & Hosp, Ctr Stem Cell Res, Vellore 632002, Tamil Nadu, India. [Ramasamy, Boopalan] Royal Darwin Hosp, Dept Orthopaed, 105 Rocklands Dr, Tiwi, NT 0810, Australia. Kachroo, U (reprint author), Christian Med Coll & Hosp, Dept Physiol, Vellore 632002, Tamil Nadu, India. elsyclarence@cmcvellore.ac.in;</p>	INT	JAN TO JUN	Physiology, Centre for Stem Cell Research	WOS:000527877500010 SCOPUS H-INDEX:64 IF: 2.167 BIOXBIO (2018/2019)

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>upasana_k@hotmail.com; sooma_a@hotmail.com; jpboopy@gmail.com; solomon@cmcvellore.ac.in</p> <p>Introduction: Interest in chondroprogenitors arose due to their inherent stem cell like properties, and their initial characterization was based on identification of a small percentage of CD49e positive cells in cultured chondrocytes (CC). It was further noted that when fresh chondrocytes (FC; reported to express low CD49e) were subjected to fibronectin adhesion assay, an isolate of chondroprogenitors was obtained, which was highly positive for CD49e, thus making it a distinguishing marker for this cell population. However, this notion was challenged when reports demonstrated high CD49e expression in CC as well. Therefore, our aim was to compare CD49e expression in FC, CC and chondroprogenitors. Methods: Chondrocytes and chondroprogenitors were isolated from articular cartilage of osteoarthritic joints from three patients. Assessment of classic fibronectin receptor (CD49e, CD29), positive (CD105, CD73, CD90) and negative (CD45, CD34) mesenchymal stem cell marker expression in all groups was performed, as chondroprogenitors fulfill the minimal criteria laid down by International Society for Cellular Therapy. Following this, adipogenic, osteogenic and chondrogenic differentiation was assessed by Oil red O, Alizarin Red and Alcian Blue staining respectively. Results and conclusion: Our observations indicate that FC show significantly low surface marker expression as compared to CC and chondroprogenitors, whereas no significant difference was seen in values when CC and chondroprogenitors were compared. Moreover, comparable results were exhibited when trilineage differentiation potential was compared across groups. Since CC and chondroprogenitors show similar characteristics, there is a pressing need for a specific differentiating marker to isolate a pure population of chondroprogenitors.</p>				
690.	<p>Vinod, E., Kachroo, U., Rebekah, G., Yadav, B. K. and Ramasamy, B. Characterization of human articular chondrocytes and chondroprogenitors derived from non-diseased and osteoarthritic knee joints to assess superiority for cell-based therapy Acta Histochem; 2020, 122 (6): 151588 Address: Department of Physiology, Christian Medical College, Vellore, 632002, India; Centre for Stem Cell Research, Christian Medical College, Vellore, 632002, India. Electronic Address: elsyclarence@cmcvellore.ac.in. Department of Physiology, Christian Medical College, Vellore, 632002, India. Electronic Address: upasana_k@hotmail.com. Department of Biostatistics, Christian Medical College, Vellore, 632002, India. Electronic Address: gracerebekah@gmail.com. Department of Biostatistics, Christian Medical College, Vellore, 632002, India. Electronic Address: yadavbijesh@gmail.com. Centre for Stem Cell Research, Christian Medical College, Vellore, 632002, India; Department of Orthopaedics, Christian Medical College, Vellore, 632004, India.</p>	INT	JUL TO DEC	Physiology, Centre for Stem Cell Research, Biostatistics	PMID: 32778244

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Electronic Address: jpboopy@gmail.com.</p> <p>PURPOSE: Cell based therapy is constantly underway since regeneration of genuine hyaline cartilage is under par. Much attention has been afforded to chondroprogenitors recently, as an alternative cell substitute for cartilage repair. Although single source derivation of chondrocytes and chondroprogenitors is advantageous, lack of a characteristic differentiating marker obscures clear identification, which is essential to create a biological profile and is also required to assess cell type superiority for cartilage repair. METHODS: Cells obtained from three non-diseased/osteoarthritic human knee joints each, were expanded in culture up to passage 10. Characterization studies were performed using flow cytometry; gene expression was studied using RT-PCR; growth kinetics and tri-lineage differentiation was also studied to construct a better profile of chondroprogenitors as well as chondrocytes. RESULTS AND CONCLUSION: Our results showed that both cell populations exhibited similar cell surface characteristics except for non-diseased chondroprogenitors, which showed markedly low expression of CD34 and high expression of CD166. Trilineage data was suggestive of multilineage potential for both cell types with chondroprogenitors showing notably higher glycosaminoglycan and lower calcified matrix deposition. Data acquired from this study aided in describing cellular behavior of human articular cartilage derived chondroprogenitors in conditions not reported earlier. Our comparative analysis suggests that sorting based on a combination of markers (CD34- and CD166+) would yield a population of cells with minimal contamination by chondrocytes, which may provide translatable results in terms of enhanced chondrogenesis and reduced hypertrophy; both indispensable for the field of cartilage regeneration.</p>				
691.	<p>Vinod, E., Parameswaran, R., Manickam Amirtham, S., Livingston, A., Ramasamy, B. and Kachroo, U.</p> <p>Comparison of the efficiency of laminin versus fibronectin as a differential adhesion assay for isolation of human articular cartilage derived chondroprogenitors Connect Tissue Res; 2020, 1-9</p> <p>Address: Department of Physiology, Christian Medical College, Vellore, India. Centre for Stem Cell Research, Christian Medical College, Vellore, India. Department of Orthopaedics, Christian Medical College, Vellore, India. Department of Orthopaedics, Royal Darwin Hospital, Tiwi, Australia. Livingston, A (reprint author), Christian Med Coll & Hosp, Dept Orthopaed, Vellore 632004, Tamil Nadu, India. livings78@gmail.com</p> <p>Purpose: Cartilage repair following trauma or degeneration is poor, making cell-based therapy an important avenue of treatment. Chondrocytes and mesenchymal stem cells have been extensively studied as potential candidates, although tendency toward hypertrophy and formation of mixed hyaline-fibrocartilage</p>	INT	JAN TO JUN	Physiology, Centre for Stem Cell Research, Orthopaedics	<p>PMID:32406271 WOS:000534144800001 SCOPUS H-INDEX:15 IF: 4.154 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	necessitates further optimization. Chondroprogenitors, isolated using fibronectin adhesion assay are reported to show reduced hypertrophy and enhanced chondrogenesis. Laminin, an essential component of extracellular matrix, has been shown to positively modulate chondrocyte proliferation, migration, and survival. The aim of our study was to evaluate the effect of laminin as a differential adhesion assay and obtain an enriched population of chondroprogenitors and assess its efficiency when compared to progenitors obtained via fibronectin. Materials and methods: Chondrocytes were isolated from three osteoarthritic knee joints and subjected to fibronectin and laminin adhesion to obtain chondroprogenitors. After expansion in culture, they were assessed for differences in their biological characteristics based on growth kinetics, surface marker expression, gene expression for assessing markers of chondrogenesis and hypertrophy, and potential for tri-lineage differentiation. Results: Our results showed that cells isolated by laminin and fibronectin both displayed comparable characteristics except in terms of proliferative potential (higher in laminin), gene expression of COL2A1 (lower in laminin) and trilineage potential where the laminin group showed higher osteogenic and adipogenic differentiation. Conclusion: This was the first attempt to successfully isolate human articular cartilage derived chondroprogenitor clones using laminin, which retained stem cell like characteristics. Further evaluation to optimize this method will help enhance chondroprogenitor characteristics, for use in cartilage repair.				
692.	<p>Vinod, E., Parameswaran, R., Ramasamy, B. and Kachroo, U. Pondering the Potential of Hyaline Cartilage-Derived Chondroprogenitors for Tissue Regeneration: A Systematic Review Cartilage; 2020, 1947603520951631 Address: Department of Physiology, Christian Medical College, Vellore, India. Centre for Stem Cell Research (a unit of InStem, Bengaluru), Christian Medical College, Vellore, India. Department of Orthopaedics, Royal Darwin Hospital, Tiwi, Northern Territory, Australia.</p> <p>OBJECTIVE: Chondroprogenitors have recently gained prominence due to promising results seen in in vitro and animal studies as a potential contender in cell-based therapy for cartilage repair. Lack of consensus regarding nomenclature, isolation techniques, and expansion protocols create substantial limitations for translational research, especially given the absence of distinct markers of identification. The objective of this systematic review was to identify and collate information pertaining to hyaline cartilage-derived chondroprogenitors, with regard to their isolation, culture, and outcome measures. DESIGN: As per Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines, a web-based search of Scopus and PubMed databases was performed from January 2000 to May 2020, which yielded 509 studies. A total of 65 studies were identified that met the standardized inclusion criteria which comprised of, but was not limited to,</p>	INT	JUL TO DEC	Physiology, Centre for Stem Cell Research	PMID: 32840123

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	progenitors derived from fibronectin adhesion, migrated subpopulation from explant cultures, and single-cell sorting. RESULT: Literature search revealed that progenitors demonstrated inherent chondrogenesis and minimal tendency for hypertrophy. Multiple sources also demonstrated significantly better outcomes that bone marrow-derived mesenchymal stem cells and comparable results to chondrocytes. With regard to progenitor subgroups, collated evidence points to better and consistent outcomes with the use of migratory progenitors when compared to fibronectin adhesion assay-derived progenitors, although a direct comparison between the two cell populations is warranted. CONCLUSION: Since chondroprogenitors exhibit favorable properties for cartilage repair, efficient characterization of progenitors is imperative, to complete their phenotypic profile, so as to optimize their use in translational research for neocartilage formation.				
693.	<p>Vinod, E., Parameswaran, R., Rebekah, G., Livingston, A., Ramasamy, B. and Kachroo, U. COMPARISON OF HUMAN BONE MARROW MESENCHYMAL STEM CELLS, ARTICULAR CARTILAGE DERIVED CHONDROPROGENITORS AND CHONDROCYTES TO ASSESS CELL SUPERIORITY FOR CARTILAGE REGENERATION Osteoarthritis and Cartilage; 2020, 28 S517-S517</p> <p>Address: [Vinod, E.; Parameswaran, R.; Rebekah, G.; Livingston, A.; Kachroo, U.] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Ramasamy, B.] Royal Darwin Hosp, Tiwi, Australia.</p>	INT	JAN TO JUN	Orthopaedics	<p>WOS:000527813600796 H-INDEX:5 IF: 0.160 RESURCHIFY (2018/2019)</p>
694.	<p>Vinod, E., Ramasamy, B. and Kachroo, U. Comparison of immunogenic markers of human chondrocytes and chondroprogenitors derived from non-diseased and osteoarthritic articular cartilage Journal of Orthopaedics, Trauma and Rehabilitation; 2020, 27 (1): 63-67</p> <p>Address: Department of Physiology, Christian Medical College, Vellore, India Centre for Stem Cell Research, Christian Medical College, Vellore, India Department of Orthopaedics, Royal Darwin Hospital, Tiwi, Australia</p> <p>Background: In the field of cartilage repair, cell-based therapy, employing the use of mesenchymal stem cells and chondrocytes maybe a propitious treatment option. Once transferred, success of transplanted cells is determined by their immunogenicity making assessment imperative. Another contender in the field, may be articular chondroprogenitors (CPs) shown to possess chondrogenic potential and reduced expression of hypertrophy markers. Our aim was to assess immunogenic properties of CPs (non-diseased and osteoarthritic (OA)) and compare them with chondrocytes since it may be a good alternative for cell-based therapy and data regarding its immunogenic profile is limited. Methods: Human chondrocytes and CPs from the same cartilage source were isolated. Passage 0 cells</p>	INT	JAN TO JUN	Physiology, Centre for Stem Cell Research, Orthopaedics	<p>SCOPUS H-INDEX:148 IF: 4.879 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	characterized by fluorescence-activated cell sorting against human surface antigen were human leucocyte antigen class I (HLA-A2 and HLA-B7), HLA-DR and its costimulatory molecules (CD80 and CD86) and macrophage/monocyte marker (CD14). Results and conclusion: Our observations indicated that CPs isolated from human non-diseased and OA cartilage showed similar immunogenic properties to chondrocytes isolated from the same source with no significant difference in expression. High-to-moderate expression of MHC class I (HLA-A2 and HLA-B7) and moderate-to-low expression of MHC class II (HLA-DR and its co-stimulatory molecules CD80 and CD86) were observed. This is the first report to shed insight on the immunogenic properties of human cartilage-derived progenitors, a potential contender in the field of regenerative therapy for formation of genuine hyaline cartilage. © The Author(s) 2020.				
695.	<p>Virk, R. K., Jayakumar, J., Mendenhall, I. H., Moorthy, M., Lam, P., Linster, M., Lim, J., Lin, C., Oon, L. L. E., Lee, H. K., Koay, E. S. C., Vijaykrishna, D., Smith, G. J. D. and Su, Y. C. F.</p> <p>Divergent evolutionary trajectories of influenza B viruses underlie their contemporaneous epidemic activity Proceedings of the National Academy of Sciences of the United States of America; 2020, 117 (1): 619-628</p> <p>Address: [Virk, Ramandeep K.; Jayakumar, Jayanthi; Mendenhall, Ian H.; Lam, Pauline; Linster, Martin; Lim, Julia; Smith, Gavin J. D.; Su, Yvonne C. F.] Duke Nat Univ Singapore NUS, Med Sch, Programme Emerging Infect Dis, Singapore 169857, Singapore. [Moorthy, Mahesh] Christian Med Coll & Hosp, Dept Clin Virol, Vellore 632004, Tamil Nadu, India. [Lin, Cui] Minist Hlth, Natl Publ Hlth Lab, Singapore 308442, Singapore. [Oon, Lynette L. E.] Singapore Gen Hosp, Dept Mol Pathol, Singapore 169608, Singapore. [Lee, Hong Kai; Koay, Evelyn S. C.] Natl Univ Singapore Hosp, Dept Lab Med, Singapore 117597, Singapore. [Vijaykrishna, Dhanasekaran] Monash Univ, Biomed Discovery Inst, Dept Microbiol, Clayton, Vic 3800, Australia. [Vijaykrishna, Dhanasekaran] Peter Doherty Inst, Collaborating Ctr Influenza Res & Surveillance, World Hlth Org, Melbourne, Vic 3000, Australia. [Smith, Gavin J. D.] SingHlth Duke NUS Acad Med Ctr, SingHlth Duke NUS Global Hlth Inst, Singapore 169857, Singapore. [Smith, Gavin J. D.] Duke Univ, Duke Global Hlth Inst, Durham, NC 27710 USA.</p> <p>Smith, GJD; Su, YCF (reprint author), Duke Nat Univ Singapore NUS, Med Sch, Programme Emerging Infect Dis, Singapore 169857, Singapore. gavin.smith@duke-nus.edu.sg; yvonne.su@duke-nus.edu.sg</p> <p>Influenza B viruses have circulated in humans for over 80 y, causing a significant disease burden. Two antigenically distinct lineages ("B/Victoria/2/87-like" and "B/Namagata/16/88-like," termed Victoria and Yamagata) emerged in the 1970s and have cocirculated since 2001. Since 2015 both lineages have shown unusually high levels of epidemic activity, the reasons for which are unclear. By analyzing</p>	INT	JAN TO JUN	Clinical Virology	<p>WOS:000506001200085 SCOPUS H-INDEX:737 IF: 9.580 BIOXBIO (2018/2019)</p>

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	<p>over 12,000 influenza B virus genomes, we describe the processes enabling the long-term success and recent resurgence of epidemics due to influenza B virus. We show that following prolonged diversification, both lineages underwent selective sweeps across the genome and have subsequently taken alternate evolutionary trajectories to exhibit epidemic dominance, with no reassortment between lineages. Hemagglutinin deletion variants emerged concomitantly in multiple Victoria virus clades and persisted through epistatic mutations and interclade reassortment-a phenomenon previously only observed in the 1970s when Victoria and Yamagata lineages emerged. For Yamagata viruses, antigenic drift of neuraminidase was a major driver of epidemic activity, indicating that neuraminidase-based vaccines and cross-reactivity assays should be employed to monitor and develop robust protection against influenza B morbidity and mortality. Overall, we show that long-term diversification and infrequent selective sweeps, coupled with the reemergence of hemagglutinin deletion variants and antigenic drift of neuraminidase, are factors that contributed to successful circulation of diverse influenza B clades. Further divergence of hemagglutinin variants with poor cross-reactivity could potentially lead to circulation of 3 or more distinct influenza B viruses, further complicating influenza vaccine formulation and highlighting the urgent need for universal influenza vaccines.</p>				
696.	<p>Vitale, S. G., Caruso, S., Ciebiera, M., T?R?K, P., Tesarik, J., Vilos, G. A., Cholkeri-Singh, A., Gulino, F. A., Kamath, M. S. and Cianci, A. Management of anxiety and pain perception in women undergoing office hysteroscopy: a systematic review Archives of Gynecology and Obstetrics; 2020, 301 (4): 885-894</p> <p>Address: [Vitale, Salvatore Giovanni; Caruso, Salvatore; Gulino, Ferdinando Antonio; Cianci, Antonio] Univ Catania, Dept Gen Surg & Med Surg Specialties, Obstet & Gynecol Unit, Catania, Italy. [Ciebiera, Michal] Ctr Postgrad Med Educ, Dept Obstet & Gynecol 2, Warsaw, Poland. [Torok, Peter] Univ Debrecen, Inst Obstet & Gynaecol, Fac Med, Debrecen, Hungary. [Tesarik, Jan] MARGen Clin, Granada, Spain. [Vilos, George Angelos] Western Univ, Schulich Sch Med & Dent, Div Reprod Endocrinol & Infertil, Dept Obstet & Gynecol, London, ON, Canada. [Cholkeri-Singh, Aarathi] Lutheran Gen Hosp, Dept Obstet & Gynecol, Park Ridge, IL 60068 USA. [Kamath, Mohan Shashikant] Christian Med Coll & Hosp, Dept Reprod Med, Vellore, Tamil Nadu, India. Vitale, SG (reprint author), Univ Catania, Dept Gen Surg & Med Surg Specialties, Obstet & Gynecol Unit, Catania, Italy. sgvitale@unict.it</p> <p>Purpose The aim of this review is to provide an overview of the literature about the perception and management of anxiety and pain in women undergoing an office hysteroscopic procedure. Methods We performed a systematic literature search in Embase, PubMed/MEDLINE, Cochrane Library and Web of Science for original</p>	INT	JAN TO JUN	Reproductive Medicine Unit	<p>WOS:000521965400004 SCOPUS H-INDEX:63 IF: 2.199 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	studies written in English (registered in PROSPERO 2019-CRD42019132341), using the terms 'hysteroscopy' AND 'pain' AND 'anxiety' published up to January 2019. Only original articles (randomized, observational and retrospective studies) about management of anxiety and pain related to the hysteroscopic procedure were considered eligible. Results Our literature search produced 84 records. After exclusions, 11 studies including 2222 patients showed the following results: (a) pain experienced during hysteroscopy is negatively affected by preprocedural anxiety; (b) pharmacological interventions seem to be help in reducing pain during hysteroscopy; (c) waiting time before the procedure is a significant factor affecting patients' anxiety; (d) music during the procedure may be helpful in reducing anxiety. Conclusions The utilization of office hysteroscopy is hampered by varying levels of anxiety and pain perceived by women who are candidates for the procedure. For these reasons, it is essential to identify effective pharmacological and non-pharmacological strategies to alleviate these factors. We recommend further studies especially focusing on non-pharmacological interventions to facilitate the dissemination of good clinical practices among hysteroscopists.				
697.	<p>Vupputuri, H., Gandham, E. J., Mani, S. A., Raju, K. P., Aaron, S. and Chacko, A. G. Dynamic imaging of the craniovertebral junction is mandatory in patients with posterior circulation strokes Eur Spine J; 2020, 29 (5): 1078-1086</p> <p>Address: Department of Neurological Sciences, Christian Medical College, Vellore, India. Department of Neurological Sciences, Christian Medical College, Vellore, India. gandham.edmond@gmail.com. Department of Radiodiagnosis, Christian Medical College, Vellore, India. Gandham, EJ (reprint author), Christian Med Coll & Hosp, Dept Neurol Sci, Vellore, Tamil Nadu, India. dr.hemanthvupputuri@gmail.com; gandham.edmond@gmail.com; sunithi.mani@cmcvellore.ac.in; krishnaprabhu@cmcvellore.ac.in; sanjith@cmcvellore.ac.in; arichacko@cmcvellore.ac.in</p> <p>INTRODUCTION: The course of the vertebral artery after exiting from the C1 foramen transversarium and prior to entering the dura lends itself to compression in C1-2 instability. However, atlantoaxial dislocation presenting with vertebrobasilar insufficiency and posterior circulation stroke (PCS) is rare. METHODS: In this retrospective study, we identified 96 patients with PCS who had complete radiological data. Ten (10.4%) patients had craniovertebral junction (CVJ) anomalies, of which six underwent surgery and four were managed conservatively. The clinical and functional outcomes were measured in the two groups. RESULTS: Left-sided strokes were seen in 7/10 patients, the majority of whom had left dominant vertebral arteries. The mean age at presentation in those with CVJ anomalies was 27.2 ± 12.8 years that was significantly lower than those</p>	INT	JAN TO JUN	Neurological Sciences, Radiodiagnosis	<p>PMID:32076832 WOS:000516495500001 SCOPUS H-INDEX:128 IF: 2.513 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	without CVJ anomalies, 52.2 ± 14.5 years (p ≤ 0.001). The etiologies of PCS in those < 50 years were CVJ anomalies (30%), atherosclerosis (30%) and vasculitis (27%); however, the overwhelming majority of strokes in the > 50 year age group was atherosclerosis (91%). Postoperatively, there were no recurrent strokes in the operated patients, who also obtained significant clinical improvement on the modified Rankin Scale, Nurick Scale and modified McCormick Scale as compared to those who did not undergo surgery. CONCLUSION: Early diagnosis and surgical treatment of CVJ instability prevent recurrent strokes and improve outcomes in patients with PCS. Physicians and spine surgeons need to be sensitized regarding CVJ anomalies as a cause of PCS enabling early diagnosis with dynamic imaging particularly in the younger age group. These slides can be retrieved under Electronic Supplementary Material.				
698.	Vupputuri, H., Subramanian, S., Mani, S. A., Patel, B., John, S. and Joseph, B. V. Collision Tumor at Cerebellopontine Angle in a Patient Without Neurofibromatosis Type 2 Indian J Surg Oncol; 2020, 11 (Suppl 2): 188-192 Address: Department of Neurological Sciences, Christian Medical College, Vellore, India Department of Radiodiagnosis, Christian Medical College, Vellore, India Department of Neuropathology, Christian Medical College, Vellore, India	NAT	JAN TO JUN	Neurological Sciences, Radiodiagnosis, Neuropathology	PMID: 33364695 PMC:7732908 SCOPUS H-INDEX:14 IF: 0.610 RESURCHIFY (2018/2019)
699.	Wernli, D., Jørgensen, P. S., Parmley, E. J., Troell, M., Majowicz, S., Harbarth, S., Léger, A., Lambraki, I., Graells, T., Henriksson, P. J. G., Carson, C., Cousins, M., Skoog Ståhlgren, G., Mohan, C. V., Simpson, A. J. H., Wieland, B., Pedersen, K., Schneider, A., Chandy, S. J., Wijayathilaka, T. P., Delamare-Deboutteville, J., Vila, J., Stålsby Lundborg, C. and Pittet, D. Evidence for action: a One Health learning platform on interventions to tackle antimicrobial resistance The Lancet Infectious Diseases; 2020, 20 (12): e307-e311 Address: Geneva Transformative Governance Lab, Global Studies Institute, University of Geneva, Geneva, Switzerland Infection Control Program and World Health Organization Collaborating Centre on Patient Safety, University Hospitals and Faculty of Medicine, University of Geneva, Geneva, Switzerland School of Public Health, Li Ka Shing Faculty of Medicine, University of Hong Kong Hong Kong Special Administrative Region, China Global Economic Dynamics and the Biosphere, The Royal Swedish Academy of Sciences, Stockholm, Sweden Beijer Institute of Ecological Economics, The Royal Swedish Academy of Sciences, Stockholm, Sweden Stockholm Resilience Centre, Stockholm University, Stockholm, Sweden Department of Population Medicine, Ontario Veterinary College, University of Guelph, Guelph, ON, Canada School of Public Health and Health Systems, University of Waterloo, Waterloo, ON,	INT	JUL TO DEC	Pharmacology and Clinical Pharmacology	WOS:000594457100003

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Canada WorldFish, Penang, Malaysia Centre for Foodborne, Environmental and Zoonotic Infectious Diseases, Public Health Agency of Canada, Guelph, ON, Canada Unit for Antibiotics and Infection Control, The Public Health Agency of Sweden, Solna, Sweden Centre for Tropical Medicine and Global Health, Nuffield Department of Medicine Research Building, University of Oxford, Oxford, United Kingdom Lao-Oxford-Mahosot Hospital-Wellcome Trust Research Unit, Microbiology Laboratory, Mahosot Hospital, Vientiane, Laos International Livestock Research Institute, Nairobi, Kenya National Veterinary Institute, Uppsala, Sweden Department of Clinical, Educational and Health Psychology, University College London, London, United Kingdom Department of Pharmacology and Clinical Pharmacology, Christian Medical College, Vellore, India World Organisation for Animal Health, OIE Sub-Regional Representation for South East Asia, Bangkok, Thailand Department of Clinical Microbiology, Biomedical Diagnostic Center, Hospital Clinic School of Medicine and Barcelona Institute for Global Health, University of Barcelona, Barcelona, Spain Department of Global Public Health, Karolinska Institutet, Stockholm, Sweden</p> <p>Improving evidence for action is crucial to tackle antimicrobial resistance. The number of interventions for antimicrobial resistance is increasing but current research has major limitations in terms of efforts, methods, scope, quality, and reporting. Moving the agenda forwards requires an improved understanding of the diversity of interventions, their feasibility and cost-benefit, the implementation factors that shape and underpin their effectiveness, and the ways in which individual interventions might interact synergistically or antagonistically to influence actions against antimicrobial resistance in different contexts. Within the efforts to strengthen the global governance of antimicrobial resistance, we advocate for the creation of an international One Health platform for online learning. The platform will synthesise the evidence for actions on antimicrobial resistance into a fully accessible database; generate new scientific insights into the design, implementation, evaluation, and reporting of the broad range of interventions relevant to addressing antimicrobial resistance; and ultimately contribute to the goal of building societal resilience to this central challenge of the 21st century. © 2020 Elsevier Ltd</p>				
700.	<p>Wisely, J. P., Thomas, A., John, N. O., Venkatasai, J., Sathyamurthy, A., Ramireddy, J. K. and Ram, T. S. Incidence and Outcomes of Para-aortic Nodal Recurrence After Definitive Treatment for Cervical Cancer: A Single Institution Experience from South India Indian Journal of Gynecologic Oncology; 2020, 18 (4):</p>	NAT	JUL TO DEC	Radiation Oncology, Gynaecologic Oncology	SCOPUS

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Address: Department of Radiation Oncology, Dr. Ida B Scudder Cancer Centre, Christian Medical College, Vellore, Tamil Nadu, India Department of Gynaecologic Oncology, Christian Medical College, Vellore, Tamil Nadu, India</p> <p>Purpose: To analyse the patterns of para-aortic nodal recurrence in carcinoma cervix and the outcomes with various treatment options at our institution.</p> <p>Methods: The data of patients diagnosed to have cervical cancer between January 2012 and December 2017 were retrieved from the electronic medical records. Those with para-aortic recurrence following definitive treatment for cervical cancer were identified and were classified as isolated para-aortic nodal recurrence, para-aortic and pelvic recurrences, and para-aortic and distant metastases. Analysis was done based on demographic characteristics, disease stage at diagnosis, pathological characteristics, treatment modality, and follow-up. Results: There were 18 isolated para-aortic recurrences (41%), 17 para-aortic with distant metastasis (39%), and 9 para-aortic with pelvic metastasis (20%). The median time to recurrence from diagnosis for isolated para-aortic recurrences, para-aortic with pelvic recurrences, and para-aortic with distant metastasis was 26 months, 14 months, and 12.5 months, respectively. The median survival of the entire cohort of patients was 36 months. The median survival of isolated para-aortic recurrence, para-aortic with pelvic recurrence, and para-aortic with distant metastasis was 45 months, 16 months, and 10 months, respectively (p = 0.001). The median survival was 45 months for those who received combined modality treatment with chemotherapy followed by RT, followed by 30 months for those who received RT alone, and 11 months for those who received chemo alone. For patients who received best supportive care alone, it was 7 months (p = 0.055). Conclusion: Isolated para-aortic recurrences present late and have a relatively favourable prognosis when treated with a combined modality approach. At recurrence, definitive para-aortic radiation therapy combined with chemotherapy had the best outcome. High-risk approach with prophylactic lower para-aortic radiation for high volume primary and pelvic nodal disease needs to be studied for further improvement in outcomes. © 2020, Association of Gynecologic Oncologists of India.</p>				
701.	<p>Wolbrink, T. A., Van Schaik, S. M., Turner, D. A., Staffa, S. J., Keller, E., Boyer, D. L., Chong, G., Cross, J., Del Castillo, S., Feng, A., Hum, R. S., James, E. J., Johnson, A., Kandil, S., Kneyber, M., Rameshkumar, R., Levin, A., Lodha, R., Jayashree, M., Olivero, A., Oberender, F., Panesar, R. S., Pooni, P. A., Rehder, K. J., Sankaranarayanan, S., Scheffler, M., Sharara-Chami, R., Siems, A. L., Padur Sivaraman, R., Tegtmeyer, K., Valentine, S., Villosio, F., Von Saint Andre-Von Arnim, A., Winkler, M., Dede, C., Burns, J. P., Alvarez, E., Chawla, N., Pham, N., Pitfield, S., Shamarao, S., Tinsley, C. and Game Based Educ, Residency</p> <p>Online Learning and Residents' Acquisition of Mechanical Ventilation Knowledge: Sequencing Matters</p>	INT	JAN TO JUN	Paediatric Intensive Care	<p>WOS:000502770900002 SCOPUS H-INDEX:263 IF: 6.971 BIOXBIO (2018/2019)</p>

CMC SCIENTIFIC RESEARCH PUBLICATION FOR THE YEAR 2020 (JANUARY TO DECEMBER)

S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Critical Care Medicine; 2020, 48 (1): E1-E8</p> <p>Address: [Wolbrink, Traci A.; Staffa, Steven J.; Keller, Eleanor; Burns, Jeffrey P.] Boston Childrens Hosp, Dept Anesthesiol Crit Care & Pain Med, Boston, MA USA. [Wolbrink, Traci A.; Burns, Jeffrey P.] Harvard Med Sch, Dept Anaesthesia, Boston, MA 02115 USA. [van Schaik, Sandrijn M.] Univ Calif San Francisco, Div Pediat Crit Care Med, San Francisco, CA 94143 USA. [Turner, David A.; Rehder, Kyle J.] Duke Childrens Hosp, Dept Pediat, Div Pediat Crit Care, Durham, NC USA. [Boyer, Donald L.] Childrens Hosp Philadelphia, Dept Anesthesiol & Crit Care Med, Philadelphia, PA 19104 USA. [Boyer, Donald L.] Univ Penn, Perelman Sch Med, Philadelphia, PA 19104 USA. [Chong, Grace] Univ Chicago, Comer Childrens Hosp, Div Pediat Crit Care, Chicago, IL 60637 USA. [Cross, Jarrod] Perth Childrens Hosp, Paediat Crit Care, Perth, WA, Australia. [del Castillo, Sylvia] Childrens Hosp Los Angeles, Dept Anesthesiol & Crit Care Med, Los Angeles, CA USA. [Feng, Andrew] Kapiolani Med Ctr Women & Children, Honolulu, HI USA. [Hum, R. Stanley] Columbia Univ, Dept Pediat, Div Pediat Crit Care Med, New York, NY 10027 USA. [James, Ebor Jacob] Christian Med Coll & Hosp, Vellore, Tamil Nadu, India. [Johnson, Amanda] Univ Massachusetts, Childrens Med Ctr, Div Pediat Crit Care Med, Worcester, MA 01605 USA. [Kandil, Sarah] Yale Univ, Sch Med, Dept Pediat Crit Care Med, New Haven, CT USA. [Kneyber, Martin] Univ Groningen, Univ Med Ctr Groninger, Beatrix Childrens Hosp, Groningen, Netherlands. [Rameshkumar, Ramachandran] JIPMER, Div Pediat Crit Care, Pondicherry, India. [Levin, Amanda; Siems, Ashley L.] Childrens Natl Hlth Syst, Div Crit Care Med, Washington, DC USA. [Lodha, Rakesh] All India Inst Med Sci, Dept Pediat, New Delhi, India. [Jayashree, Muralidharan] Postgrad Inst Med Educ & Res, Chandigarh, India. [Olivero, Anthony] Helen DeVos Childrens Hosp, Grand Rapids, MI USA. [Oberender, Felix] Monash Childrens Hosp, Pediat Crit Care Med, Melbourne, Vic, Australia. [Panesar, Rahul S.] Stony Brook Childrens Hosp, Stony Brook, NY USA. [Pooni, Puneet A.] Dayanand Med Coll & Hosp, Ludhiana, Punjab, India. [Sankaranarayanan, Shuba] Sri Ramachandra Med Coll & Res Inst, Dept Pediat, Chennai, Tamil Nadu, India. [Scheffler, Margaret] Hasbro Childrens Hosp, Providence, RI USA. [Sharara-Chami, Rana] Amer Univ Beirut, Med Ctr, Dept Pediat & Adolescent Med, Beirut, Lebanon. [Tegtmeyer, Ken] Cincinnati Childrens Hosp Med Ctr, Cincinnati, OH 45229 USA. [Tegtmeyer, Ken] Univ Cincinnati, Coll Med, Dept Pediat, Cincinnati, OH USA. [Valentine, Stacey] Univ Massachusetts, Childrens Med Ctr, Div Pediat Crit Care Med, Worcester, MA 01605 USA. [Villois, Florencia] Garrahan Hosp, Buenos Aires, Argentina. [von Saint Andre-von Arnim, Amelie] Seattle Childrens, Dept Pediat, Div Pediat Crit Care, Seattle, WA USA. [Winkler, Margaret] Univ Washington, Seattle, WA 98195 USA. [Dede, Chris] Univ Alabama Birmingham, Birmingham, AL USA. [Dede, Chris] Harvard Grad Sch Educ, Cambridge, MA USA. [Alvarez, Elena] Hosp Infantil La Paz, Madrid, Spain. [Chawla, Nitin] Lotus Hosp Women & Children, Hyderabad, India. [Nga Pham] Childrens Hosp Atlanta, Atlanta, GA USA. [Pitfield, Sandy] British Columbia Childrens Hosp, Vancouver, BC, Canada. [Shamarao, Shivakumar] Manipal Hosp, Bangalore, Karnataka, India. [Tinsley, Cynthia] Loma Linda Univ, Childrens Hosp, Div Pediat</p>				

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>Crit Care Med, Loma Linda, CA 92350 USA. Wolbrink, TA (reprint author), Boston Childrens Hosp, Dept Anesthesiol Crit Care & Pain Med, Boston, MA USA.; Wolbrink, TA (reprint author), Harvard Med Sch, Dept Anaesthesia, Boston, MA 02115 USA. traci.wolbrink@childrens.harvard.edu</p> <p>Objective: Rapid advancements in medicine and changing standards in medical education require new, efficient educational strategies. We investigated whether an online intervention could increase residents' knowledge and improve knowledge retention in mechanical ventilation when compared with a clinical rotation and whether the timing of intervention had an impact on overall knowledge gains. Design: A prospective, interventional crossover study conducted from October 2015 to December 2017. Setting: Multicenter study conducted in 33 PICUs across eight countries. Subjects: Pediatric categorical residents rotating through the PICU for the first time. We allocated 483 residents into two arms based on rotation date to use an online intervention either before or after the clinical rotation. Interventions: Residents completed an online virtual mechanical ventilation simulator either before or after a 1-month clinical rotation with a 2-month period between interventions. Measurements and Main Results: Performance on case-based, multiple-choice question tests before and after each intervention was used to quantify knowledge gains and knowledge retention. Initial knowledge gains in residents who completed the online intervention (average knowledge gain, 6.9%; sd, 18.2) were noninferior compared with those who completed 1 month of a clinical rotation (average knowledge gain, 6.1%; sd, 18.9; difference, 0.8%; 95% CI, -5.05 to 6.47; p = 0.81). Knowledge retention was greater following completion of the online intervention when compared with the clinical rotation when controlling for time (difference, 7.6%; 95% CI, 0.7-14.5; p = 0.03). When the online intervention was sequenced before (average knowledge gain, 14.6%; sd, 15.4) rather than after (average knowledge gain, 7.0%; sd, 19.1) the clinical rotation, residents had superior overall knowledge acquisition (difference, 7.6%; 95% CI, 2.01-12.97; p = 0.008). Conclusions: Incorporating an interactive online educational intervention prior to a clinical rotation may offer a strategy to prime learners for the upcoming rotation, augmenting clinical learning in graduate medical education.</p>				
702.	<p>Wyres, K. L., Nguyen, T. N. T., Lam, M. M. C., Judd, L. M., Chau, N. V., Dance, D. A. B., Ip, M., Karkey, A., Ling, C. R. L., Miliya, T., Newton, P. N., Lan, N. P. H., Sengduangphachanh, A., Turner, P., Veeraraghavan, B., Vinh, P. V., Vongsouvath, M., Thomson, N. R., Baker, S. and Holt, K. E.</p> <p>Genomic surveillance for hypervirulence and multi-drug resistance in invasive <i>Klebsiella pneumoniae</i> from South and Southeast Asia Genome Medicine; 2020, 12 (1): 16</p> <p>Address: [Wyres, Kelly L.; Lam, Margaret M. C.; Judd, Louise M.; Holt, Kathryn E.] Monash Univ, Cent Clin Sch, Dept Infect Dis, Melbourne, Vic 3004, Australia.</p>	INT	JAN TO JUN	Clinical Microbiology	<p>WOS:000521261800001 SCOPUS H-INDEX:76 IF: 1.605 BIOXBIO (2018/2019)</p>

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>[Nguyen, To N. T.; Vinh Phat Voong] Univ Oxford, Hosp Trop Dis, Clin Res Unit, Ho Chi Minh City, Vietnam. [Chau Nguyen; Lan Nguyen Phu Huong] Hosp Trop Dis, Ho Chi Minh City, Vietnam. [Dance, David A. B.; Newton, Paul N.; Sengduangphachanh, Amphone; Vongsouvath, Manivanh] Mahosot Hosp, Microbiol Lab, Lao Oxford Mahosot Hosp Wellcome Trust Res Unit, Viangchan, Laos. [Dance, David A. B.; Karkey, Abhilasha; Ling, Clare L.; Newton, Paul N.; Turner, Paul] Univ Oxford, Ctr Trop Med & Global Hlth, Oxford, England. [Dance, David A. B.; Newton, Paul N.; Thomson, Nicholas R.; Holt, Kathryn E.] London Sch Hyg & Trop Med, London, England. [Ip, Margaret] Chinese Univ Hong Kong, Dept Microbiol, Hong Kong, Peoples R China. [Karkey, Abhilasha] Univ Oxford, Clin Res Unit, Patan Acad Hlth Sci, Kathmandu, Nepal. [Ling, Clare L.] Mahidol Univ, Fac Trop Med, Mahidol Oxford Trop Med Res Unit, Shoklo Malaria Res Unit, Mae Sot 63110, Thailand. [Miliya, Thyl; Turner, Paul] Angkor Hosp Children, Cambodia Oxford Med Res Unit, Siem Reap, Cambodia. [Veeraraghavan, Balaji] Christian Med Coll & Hosp, Dept Clin Microbiol, Vellore, Tamil Nadu, India. [Thomson, Nicholas R.] Wellcome Trust Sanger Inst, Cambridge, England. [Baker, Stephen] Univ Cambridge, Dept Med, CITIID, Cambridge Biomed Campus, Cambridge CB2 0AW, England. Baker, S (reprint author), Univ Cambridge, Dept Med, CITIID, Cambridge Biomed Campus, Cambridge CB2 0AW, England. sgb47@medschl.cam.ac.uk</p> <p>Background <i>Klebsiella pneumoniae</i> is a leading cause of bloodstream infection (BSI). Strains producing extended-spectrum beta-lactamases (ESBLs) or carbapenemases are considered global priority pathogens for which new treatment and prevention strategies are urgently required, due to severely limited therapeutic options. South and Southeast Asia are major hubs for antimicrobial-resistant (AMR) <i>K. pneumoniae</i> and also for the characteristically antimicrobial-sensitive, community-acquired "hypervirulent" strains. The emergence of hypervirulent AMR strains and lack of data on exopolysaccharide diversity pose a challenge for <i>K. pneumoniae</i> BSI control strategies worldwide. Methods We conducted a retrospective genomic epidemiology study of 365 BSI <i>K. pneumoniae</i> from seven major healthcare facilities across South and Southeast Asia, extracting clinically relevant information (AMR, virulence, K and O antigen loci) using Kleborate, a <i>K. pneumoniae</i>-specific genomic typing tool. Results <i>K. pneumoniae</i> BSI isolates were highly diverse, comprising 120 multi-locus sequence types (STs) and 63 K-loci. ESBL and carbapenemase gene frequencies were 47% and 17%, respectively. The aerobactin synthesis locus (<i>iuc</i>), associated with hypervirulence, was detected in 28% of isolates. Importantly, 7% of isolates harboured <i>iuc</i> plus ESBL and/or carbapenemase genes. The latter represent genotypic AMR-virulence convergence, which is generally considered a rare phenomenon but was particularly common among South Asian BSI (17%). Of greatest concern, we identified seven novel plasmids carrying both <i>iuc</i> and AMR genes, raising the prospect of co-transfer of these phenotypes among <i>K. pneumoniae</i>. Conclusions <i>K. pneumoniae</i> BSI in South and Southeast Asia are caused by different STs from those predominating in other regions, and with higher frequency of acquired virulence</p>				

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	determinants. K. pneumoniae carrying both iuc and AMR genes were also detected at higher rates than have been reported elsewhere. The study demonstrates how genomics-based surveillance-reporting full molecular profiles including STs, AMR, virulence and serotype locus information-can help standardise comparisons between sites and identify regional differences in pathogen populations.				
703.	<p>Yassin, M. A., Taher, A., Mathews, V., Hou, H. A., Shamsi, T., Tuglular, T. F., Xiao, Z. J., Kim, S. J., Wu, D. P., Li, J. M., Rippin, G., Sadek, I., Siddiqui, A. and Wong, R. S. MERGE: A Multinational, Multicenter Observational Registry for Myeloproliferative Neoplasms in Asia, including Middle East, Turkey, and Algeria Cancer Medicine; 15</p> <p>Address: [Yassin, Mohamed A.] Hamad Med Corp, Natl Ctr Canc Care & Res, Doha, Qatar. [Taher, Ali] Amer Univ Beirut, Dept Internal Med, Med Ctr, Beirut, Lebanon. [Mathews, Vikram] Christian Med Coll & Hosp, Dept Haematol, Vellore, Tamil Nadu, India. [Hou, Hsin-An] Natl Taiwan Univ Hosp, Div Hematol, Dept Internal Med, Taipei, Taiwan. [Shamsi, Tahir] Natl Inst Blood Dis & Bone Marrow Transplantat, Res Dept, Karachi, Pakistan. [Tuglular, Tulin Firatli] Marmara Univ Hosp, Dept Hematol, Istanbul, Turkey. [Xiao, Zhijian] CAMS & PUMC, MDS & MPN Ctr, Inst Hematol & Blood Dis Hosp, Tianjin, Peoples R China. [Kim, Soo-Jeong] Severance Hosp, Seoul, South Korea. [Wu Depei] Soochow Univ, Dept Hematol, Hosp Affiliated 1, Suzhou, Peoples R China. [Li, Junmin] Ruijin Hosp, Shanghai, Peoples R China. [Rippin, Gerd] IQVIA, Neu Isenburg, Germany. [Sadek, Islam] Novartis Pharmaceut, E Hanover, NJ USA. [Siddiqui, Asif] Novartis AG, Basel, Switzerland. [Wong, Raymond S.] Chinese Univ Hong Kong, Prince Wales Hosp, Sir YK Pao Ctr Canc, Hong Kong, Peoples R China. [Wong, Raymond S.] Chinese Univ Hong Kong, Prince Wales Hosp, Dept Med & Therapeut, Hong Kong, Peoples R China.</p> <p>Wong, RS (reprint author), Chinese Univ Hong Kong, Prince Wales Hosp, Sir YK Pao Ctr Canc, Hong Kong, Peoples R China.; Wong, RS (reprint author), Chinese Univ Hong Kong, Prince Wales Hosp, Dept Med & Therapeut, Hong Kong, Peoples R China. raymondwong@cuhk.edu.hk</p> <p>Philadelphia chromosome-negative (Ph-) myeloproliferative neoplasms (MPNs) are a heterogeneous group of clonal disorders of the bone marrow, and are associated with a high disease burden, reduced quality of life (QOL), and shortened survival. This multinational, multicenter, non-interventional registry "MERGE" was initiated with an objective to collect data on the epidemiological indices of classical Ph-MPNs, existing treatment patterns, and impact of MPNs on health-related QOL in various countries/regions in Asia, including the Middle East, Turkey, and Algeria. Of the 884 eligible patients with MPNs, 169 had myelofibrosis (MF), 301 had polycythemia vera (PV), 373 had essential thrombocythemia (ET), and 41 had unclassified MPNs. The median age was 58 years (range, 47-66 years), and 50% of patients were males. The prevalence and incidence of MPNs were estimated to be</p>	INT	JAN TO JUN	Clinical Haematology	<p>WOS:000529642200001 SCOPUS H-INDEX:44 IF: 3.460 RESURCHIFY (2018/2019)</p>

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	57-81 and 12-15 per 100 000 hospital patients per year over the last 4 years, respectively, in these countries. Total symptom score (mean [standard deviation; SD]) at baseline was highest in patients with MF (23.5 [17.47]) compared with patients with ET (14.6 [14.26]) and PV (16.6 [14.84]). Patients with ET had a lower mean (SD) number of inpatient visits (0.9 [0.77] days), and patients with MF had more outpatient visits (5.2 [3.17] days) on an average, compared with the entire MPN group. The study showed that patients with MPNs have a severe disease burden and reduced QOL. A discordance between physician and patient perception of symptom assessment was observed in this study (International clinical trials registry ID: CTRI/2014/05/004598).				
704.	<p>Yoganathan, S., Arunachal, G., Kratz, L., Varman, M., Sudhakar, S., Oommen, S., Jain, S., Thomas, M. and Babuji, M.</p> <p>Guanidinoacetate methyltransferase (GAMT) deficiency, a cerebral creatine deficiency syndrome: A rare treatable metabolic disorder Annals of Indian Academy of Neurology; 2020, 23 (3): 419-421</p> <p>Address: Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, India Department of Medical Genetics, Christian Medical College, Vellore, Tamil Nadu, India Biochemical Genetics Laboratory, Kennedy Krieger Institute, John Hopkins Hospital, Baltimore, United States Department of Radiodiagnosis, Christian Medical College, Vellore, Tamil Nadu, India Department of Developmental Paediatrics, Christian Medical College, Vellore, Tamil Nadu, India Department of Dietetics, Christian Medical College, Vellore, Tamil Nadu, India Department of Human Genetics, National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru, Karnataka, 560 029, India</p>	NAT	JAN TO JUN	Neurological Sciences, Medical Genetics, Radiodiagnosis, Developmental Paediatrics, Dietetics	<p>SCOPUS H-INDEX:27 IF: 0.898 BIOXBIO (2018/2019)</p>
705.	<p>Yoganathan, S., Arunachal, G., Kratz, L., Varman, M., Thomas, M., Sudhakar, S. V., Oommen, S. P. and Danda, S.</p> <p>Metabolic Stroke: A Novel Presentation in a Child with Succinic Semialdehyde Dehydrogenase Deficiency Annals of Indian Academy of Neurology; 2020, 23 (1): 113-117</p> <p>Address: [Yoganathan, Sangeetha; Thomas, Maya] Christian Med Coll & Hosp, Dept Neurol Sci, Vellore, Tamil Nadu, India. [Arunachal, Gautham; Danda, Sumita] Christian Med Coll & Hosp, Dept Med Genet, Vellore 632004, Tamil Nadu, India. [Varman, Mugil; Sudhakar, Sniya Valsa] Christian Med Coll & Hosp, Dept Radiodiag, Vellore, Tamil Nadu, India. [Oommen, Samuel Philip] Christian Med Coll & Hosp, Dept Dev Paediat, Vellore, Tamil Nadu, India. [Kratz, Lisa] Kennedy Krieger Inst, Biochem Genet Lab, Baltimore, MD USA. Arunachal, G (reprint author), Natl Inst Mental Hlth & Neurosci, Dept Human Genet,</p>	NAT	JAN TO JUN	Neurological Sciences, Medical Genetics, Radiodiagnosis, Developmental Paediatrics	<p>WOS:000509306300025 SCOPUS H-INDEX:27 IF: 0.898 BIOXBIO (2018/2019)</p>

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	<p>Bengaluru 560029, Karnataka, India. gautham.arunachal@gmail.com</p> <p>Succinic semialdehyde dehydrogenase (SSADH) deficiency is an autosomal recessive disorder of gamma-aminobutyric acid metabolism. Children with SSADH deficiency usually manifest with developmental delay, behavioral symptoms, language dysfunction, seizures, hypotonia, extrapyramidal symptoms, and ataxia. Diagnosis of SSADH deficiency is established by an abnormal urine organic acid pattern, including increased excretion of 4-hydroxybutyric acid and the identification of biallelic pathogenic variants in aldehyde dehydrogenase 5 family, member A 1 (ALDH5A1) gene. Here, we describe a 15-month-old girl with SSADH deficiency presenting with developmental delay, language deficits, and acute-onset right hemiparesis, following recovery from a diarrheal illness. Brain magnetic resonance imaging revealed hyperintense signal changes involving the left globus pallidus in T2-weighted images with restriction of diffusion in the diffusion-weighted images. Increased excretion of 4-hydroxybutyric acid, threo-4,5-dihydroxyhexanoic acid lactone and erythro-4,5-dihydroxyhexanoic acid lactone was detected by urine organic acid analysis and a diagnosis of SSADH deficiency was confirmed by the identification of homozygous pathogenic variant in ALDH5A1. Stroke mimic is a novel presentation in our patient with SSADH deficiency. She was initiated on treatment with vigabatrin and has shown developmental gains with the recovery of right hemiparesis. Follow-up neuroimaging shows near complete resolution of signal changes in the left globus pallidus, while there was subtle hyperintensity in the right globus pallidus. The phenotypic spectrum of SSADH deficiency is widely expanding, and this disorder should be considered in the differential diagnosis of children with metabolic stroke.</p>				
706.	<p>Yoganathan, S., Sharma, S., Varman, M., Malhotra, M., Chandran, M., Arunachal, G. and Thomas, M. A Treatable Cause of Intellectual Disability and Autism in a Young Child Indian Journal of Pediatrics; 2020:2</p> <p>Address: [Yoganathan, Sangeetha; Malhotra, Mukul; Chandran, Mahalakshmi; Thomas, Maya] Christian Med Coll & Hosp, Dept Neurol Sci, Vellore, Tamil Nadu, India. [Sharma, Suvasini] Lady Hardinge Med Coll & Associated Kalawati Sara, Dept Pediat, Div Neurol, New Delhi, India. [Varman, Mugil] Christian Med Coll & Hosp, Dept Radiodiag, Vellore, Tamil Nadu, India. [Arunachal, Gautham] Natl Inst Mental Hlth Sci, Dept Human Genet, Bengaluru 560029, Karnataka, India. Arunachal, G (reprint author), Natl Inst Mental Hlth Sci, Dept Human Genet, Bengaluru 560029, Karnataka, India. gautham.arunachal@gmail.com</p>	NAT	JAN TO JUN	Neurological Sciences, Radiodiagnosis	<p>WOS:000521672900001 SCOPUS H-INDEX:46 IF: 1.136 BIOXBIO (2018/2019)</p>
707.	<p>Yusuf, M. Y. A., Kirubakaran, R., Albadwi, A. M. M., Saad, A. E., Mjahed, A. H. S. and Saleh, S. H. Levels and Determinants of Health Literacy in Bahrain's Community Context Oman Med J; 2020, 35 (6): e195 Address: Nursing Program, WHO Collaborating Centre for Nursing Development,</p>	INT	JUL TO DEC	South Asian Cochrane Centre and Network	<p>PMID: 33204521 PMC:7642644</p>

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	<p>College of Health Sciences, University of Bahrain, Salmanya Medical Complex, Salmanya, Bahrain.</p> <p>South Asian Cochrane Centre and Network, Christian Medical College and Hospital, Vellore, India.</p> <p>OBJECTIVES: We sought to assess health literacy (HL) and its associated factors in the Bahraini community using a validated HL scale and address its deficient domains to inform policy. METHODS: We carried out a conveniently sampled, cross-sectional survey using the All Aspects of Health Literacy Scale in the Bahraini community. The scale has three key aspects: basic or functional HL (FUN-4 items), which corresponds to basic reading and writing skills, and knowledge of health conditions and health systems; communicative or interactive HL (COM-3 items) on communicative and social skills to extract information from different forms of communication; and critical HL (CR-4 items), the advanced cognitive and social skills to critically analyze information and exert greater control over life events and situations relating to individual and community level wellbeing goals. We examined the association between sociodemographic and health information for the survey tool items using the chi-square test. The relationship between total scale score and subscale scores of the three domains of the survey tool to sociodemographic and health information was investigated using the t-test and ANOVA. RESULTS: Of the 836 participants (mean age = 26.6 years), single (64.0%) and university students (76.6%) were predominant; 15.6% reported long-term sickness and visited the general physician often. The highest mean item scores were for empowerment (1.8) and lowest for functional HL (0.1). The significant domain-specific responses to the survey tool items were 12 for critical HL, 10 for functional HL, six for communicative HL, and five for empowerment. Participants aged < 30 years old, female, married, pursuing/completed Master's program, employed, and whose self-rating of health was excellent had higher total HL scores. CONCLUSIONS: Older, less educated respondents with a poor self-rating of health had low HL scores. We recommend further studies to address the relative importance of functional, interactive, and critical HL in the community to promote health outcomes.</p>				
708.	<p>Zachariah, U., Nair, S. C., Goel, A., Balasubramanian, K. A., Mackie, I., Elias, E. and Eapen, C. E.</p> <p>Targeting raised von Willebrand factor levels and macrophage activation in severe COVID-19: Consider low volume plasma exchange and low dose steroid Thromb Res; 2020, 192 2</p> <p>Address: Hepatology Department, Christian Medical College, Vellore, India. Department of Transfusion Medicine and Immunohaematology, Christian Medical College, Vellore, India. The Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences, Christian Medical College, Vellore, India. Research Haematology Dept., University College London, London, UK.</p>	INT	JAN TO JUN	Hepatology, Transfusion Medicine and Immunohaematology, Wellcome Research Unit	<p>PMID:32403033 PMC ID: PMC7198395 SCOPUS H-INDEX:105 IF: 3.266 BIOXBIO (2018/2019)</p>

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	Liver Unit, University Hospitals Birmingham, Birmingham, UK. Hepatology Department, Christian Medical College, Vellore , India. Electronic Address: eapen@cmcvellore.ac.in				
709.	Zechariah, P., Surendran, S., Abraham, V. and Samarasam, I. Primary malignant melanoma of the stomach: a rare entity BMJ case reports; 2020, 13 (9): Address: Department of General Surgery, Christian Medical College and Hospital, Vellore , Tamil Nadu, India. Department of General Surgery Unit III and Upper Gastrointestinal Surgery, Christian Medical College and Hospital, Vellore , Tamil Nadu, India suraj.cmc@cmcvellore.ac.in . Department of General Surgery Unit III and Upper Gastrointestinal Surgery, Christian Medical College and Hospital, Vellore , Tamil Nadu, India. A 54-year-old man presented with easy fatiguability, dyspnoea on exertion and dyspeptic symptoms. On evaluation, he was found to have an ulcero-proliferative growth in the gastric fundus, the biopsy of which was malignant melanoma of the stomach. Further evaluation with 18F-fluorodeoxyglucose positron emission tomography-computed tomography (18F-FDG PET-CT) scan showed operable disease with no focus of disease elsewhere. He was diagnosed as primary gastric melanoma and underwent radical total gastrectomy with adequate margins. His postoperative period was uneventful. Further adjuvant therapy was refused by the patient. At 6-month follow-up, an 18F-FDG PET-CT scan was done, which showed no evidence of disease. On follow-up at 1-year, he was alive and asymptomatic.	INT	JUL TO DEC	General Surgery, General Surgery Unit III and Upper Gastrointestinal Surgery	PMID: 32912884 PMC:7482448
710.	Zheng-Pywell, R., Chen, H. and Abraham, D. Greater Mortality Seen in Medullary Thyroid Cancer Patients with Post-Surgical Progression to Metastases Compared to Stable Metastases Annals of Surgical Oncology; 2020, 27 (SUPPL 1): S202-S202 Address: [Zheng-Pywell, R.; Chen, H.] UAB, Gen Surg, Birmingham, AL USA. [Abraham, D.] Christian Med Coll Vellore, Vellore , Tamil Nadu, India.	INT	JAN TO JUN	Endocrine Surgery	WOS:000519561700511 H-INDEX:164 IF: 3.681 BIOXBIO (2018/2019)
711.	Zou, Z., Bowen, S. R., Thomas, H. M. T., Sasidharan, B. K., Rengan, R. and Zeng, J. Scanning Beam Proton Therapy versus Photon IMRT for Stage III Lung Cancer: Comparison of Dosimetry, Toxicity, and Outcomes Adv Radiat Oncol; 2020, 5 (3): 434-443 Address: Cancer Center, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China. Departments of Radiation Oncology, Seattle, Washington. Radiology, University of Washington, Seattle, Washington. Radiation Oncology, Christian Medical College, Vellore , India. PURPOSE: There are limited clinical data on scanning-beam proton therapy (SPT) in treating locally advanced lung cancer, as most published studies have used passive-scatter technology. There is increasing interest in whether the dosimetric	INT	JAN TO JUN	Radiation Oncology	PMID:32529138 PMC ID: PMC7276696 SCOPUS H-INDEX:10 IF: 0.729 Scimago (2019)

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S.No	AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT	NAT / INT	MONTH	DEPT	PMID
	<p>advantages of SPT compared with photon therapy can translate into superior clinical outcomes. We present our experience of SPT and photon intensity modulated radiation therapy (IMRT) with clinical dosimetry and outcomes in patients with stage III lung cancer. METHODS AND MATERIALS: Patients with stage III lung cancer treated at our center between 2013 and May 2018 were identified in compliance with our institutional review board (64 patients = 34 SPT + 30 IMRT). Most proton patients were treated with pencil beam scanning (28 of 34), and 6 of 34 were treated with uniform scanning. Fisher exact test, χ^2 test, and Mann-Whitney test were used to compare groups. All tests were 2-sided. RESULTS: Patient characteristics were similar between the IMRT and SPT patients, except for worse lung function in the IMRT group. Mean dose to lung, heart, and esophagus was lower in the SPT group, with most benefit in the low-dose region (lungs, 9.7 Gy vs 15.7 Gy for SPT vs IMRT, respectively [P = .004]; heart, 7 Gy vs 14 Gy [P = .001]; esophagus, 28.2 Gy vs 30.9 Gy [P = .023]). Esophagitis and dermatitis grades were not different between the 2 groups. Grade 2+ pneumonitis was 21% in the SPT group and 40% in the IMRT group (P = .107). Changes in blood counts were not different between the 2 groups. Overall survival and progression-free survival were not different between SPT and IMRT (median overall survival, 41.6 vs 30.7 months, respectively [P = .52]; median progression-free survival, 19.5 vs 14.6 months [P = .50]). CONCLUSIONS: We report our experience with SPT and IMRT in stage III lung cancer. Our cohort of patients treated with SPT had lower doses to normal organs (lungs, heart, esophagus) than our IMRT cohort. There was no statistically significant difference in toxicity rates or survival, although there may have been a trend toward lower rates of pneumonitis.</p>				

CMC SCIENTIFIC RESEARCH PUBLICATIONS FOR THE YEAR 2020 (JANUARY TO DECEMBER)

ORIGIN	JAN TO JUNE 2020	JULY TO DECEMBER 2020	TOTAL
INTERNATIONAL	269	259	528
NATIONAL	108	75	183
TOTAL =	377	334	711