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| **S.NO.** | **AUTHOR, TITLE, SOURCE, AUTHOR AFFILIATION, ABSTRACT** | **NAT/INT** | **MONTH** | **PMID** |
|  | Aalam SM(1), Manian KV(1,)(2), Bharathan SP(1,)(2), Mayuranathan T(2), Velayudhan SR(1,)(2).  Identification of Stable OCT4(+)NANOG(-) State in Somatic Cell Reprogramming.  Cell Reprogram. 2016 Nov;18(6):367-368. Epub 2016 Sep 13.  **Author information:** (1)1 Centre for Stem Cell Research, Christian Medical College , Vellore, India (2)2 Department of Haematology, Christian Medical College , Vellore, India . DOI: 10.1089/cell.2016.0018 | **INTL** | **JUL TO DEC** | **PMID:**27622636 |
|  | Abhilash KP(1), Jeevan JA(1), Mitra S(1), Paul N(1), Murugan TP(1), Rangaraj A(1), David S(1), Hansdak SG(1), Prakash JA(2), Abraham AM(3), Ramasami P(4), Sathyendra S(1), Sudarsanam TD(1), Varghese GM(1).  Acute Undifferentiated Febrile Illness in Patients Presenting to a Tertiary Care Hospital in South India: Clinical Spectrum and Outcome.  J Glob Infect Dis. 2016 Oct-Dec;8(4):147-154.  **Author information:**  (1)Department of General Medicine, Christian Medical College, Vellore, Tamil Nadu, India. (2)Department of Microbiology, Christian Medical College, Vellore, Tamil Nadu, India. (3)Department of Clinical Virology, Christian Medical College, Vellore, Tamil Nadu, India. (4)Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India.  BACKGROUND: Acute undifferentiated febrile illness (AUFI) may have similar clinical presentation, and the etiology is varied and region specific.MATERIALS AND METHODS: This prospective observational study was conducted in a tertiary hospital in South India. All adult patients presenting with AUFI of 3-14 days duration were evaluated for etiology, and the differences in presentation and outcome were analyzed. RESULTS: The study cohort included 1258 patients. A microbiological cause was identified in 82.5% of our patients. Scrub typhus was the most common cause of AUFI (35.9%) followed by dengue (30.6%), malaria (10.4%), enteric fever (3.7%), and leptospirosis (0.6%). Both scrub typhus and dengue fever peaked during the monsoon season and the cooler months, whereas no seasonality was observed with enteric fever and malaria. The mean time to presentation was longer in enteric fever (9.9 [4.7] days) and scrub typhus (8.2 [3.2] days). Bleeding manifestationswere seen in 7.7% of patients, mostly associated with dengue (14%), scrub typhus (4.2%), and malaria (4.6%). The requirement of supplemental oxygen, invasive ventilation, and inotropes was higher in scrub typhus, leptospirosis, and malaria. The overall mortality rate was 3.3% and was highest with scrub typhus (4.6%) followed by dengue fever (2.3%). Significant clinical predictors of scrub typhus were breathlessness (odds ratio [OR]: 4.96; 95% confidence interval [CI]: 3.38-7.3), total whole blood cell count >10,000 cells/mm(3) (OR: 2.31; 95% CI: 1.64-3.24), serum albumin <3.5 g % (OR: 2.32; 95% CI: 1.68-3.2). Overt bleeding manifestations (OR: 2.98; 95% CI: 1.84-4.84), and a platelet count of <150,000cells/mm(3) (OR: 2.09; 95% CI: 1.47-2.98) were independent predictors of dengue fever. CONCLUSION: The similarity in clinical presentation and diversity of etiological agents demonstrates the complexity of diagnosis and treatment of AUFI in South India. The etiological profile will be of use in the development of rational guidelines for control and treatment of AUFI.DOI: 10.4103/0974-777X.192966 | **INT** | **JUL TO DEC** | **PMCID: PMC**5126753  **PMID:**27942194 |
|  | Abiramalatha T(1), Kumar M(1), Shabeer MP(1), Thomas N(1).  Advantages of being diligent: lessons learnt from umbilical venous catheterisation in neonates.  BMJ Case Rep. 2016 Feb 3;2016. pii: bcr2015214073. doi: 10.1136/bcr-2015-214073.  **Author information:**  (1)Department of Neonatology, Christian Medical College, Vellore, Tamilnadu, India.  Umbilical venous catheters (UVCs) are commonly used in neonatal units. Abdominal radiograph, taken soon after the insertion, is used to confirm the correct placement of the catheter. However, as demonstrated by our case series, complacency when an initial UVC is normally positioned can lead to detecting UVC-related complications very late. We describe cases of three neonates where, despite the initial UVC being confirmed to be well positioned, the patients developed life-threatening complications, including liver haematoma, left atrial thrombus and pericardial effusion causing cardiac tamponade. The routine use of point of care echocardiography helped in the early diagnosis of these complications. We suggest repeated echocardiographic screening at regular intervals in all newborn babies requiring UVCs, to ensure that the catheter is maintained in the proper position and for the early detection of catheter-related complications.2016 BMJ Publishing Group Ltd.DOI: 10.1136/bcr-2015-214073 | **INT** | **JAN TO JUN** | **PMID:**26843419 |
|  | Abiramalatha T(1), Santhanam S(1), Mammen JJ(2), Rebekah G(3), Shabeer MP(1), Choudhury J(2), Nair SC(2).  Utility of neutrophil volume conductivity scatter (VCS) parameter changes as sepsis screen in neonates.  J Perinatol. 2016 Sep;36(9):733-8. doi: 10.1038/jp.2016.69. Epub 2016 Apr 28.  **Author information:** (1)Department of Neonatology, Christian Medical College, Vellore, India. (2)Department of Transfusion medicine and Immunohematology, Christian Medical College, Vellore, India. (3)Department of Biostatistics, Christian Medical College, Vellore, India.  OBJECTIVE: The objective of this study was to determine changes in neutrophil volume conductivity scatter (VCS) parameters and their distribution widths (DW) in neonatal sepsis and to estimate their optimal cutoff levels using receiver operating characteristic (ROC) curves. STUDY DESIGN: In a cohort of neonates evaluated for sepsis, blood counts and blood culture were performed initially, with repeat counts and C-reactive protein (CRP) done after 24 to 48 h. Neutrophil VCS parameters from both the initial and repeat blood counts were analyzed. Babies were classified as having blood culture-positive sepsis, probable sepsis (clinical course consistent with sepsis and CRP-positive, but culture-negative) and no sepsis (clinical course not compatible with sepsis, culture- and CRP-negative). RESULTS: A total of 600 babies were included: 240 (40%) babies in the sepsis group and 360 (60%) babies in the control group. All the neutrophil VCS parameters and their DWs (except for low angle light scatter in the repeat counts) were significantly different between the two groups, with an area under curve in the ROC curve of >0.6 for most parameters. The five most significant VCS parameters (mean neutrophil volume (MNV), median angle light scatter (MALS), lower median angle light scatter (LMALS), MNV-DW and ALL-DW) had around 65 to 75% sensitivity and specificity. A combination of leukopenia, thrombocytopenia, MNV and LMALS had a likelihood ratio (LR)+ of 15.3 and LR- of 0.17. With a pre-test probability of 40%, post-test probability increased to 91% for a positive test and decreased to 10% for a negative test. A prospective validation study was performed recruiting an additional 60 babies, which showed similar results, assuring that the cutoffs were robust. CONCLUSION: Neutrophil VCS parameters cannot be considered as stand-alone tests to diagnose or rule out neonatal sepsis, but can be used in combination with other hematological screening tests to improve the diagnostic accuracy of the neonatal sepsis screen.DOI: 10.1038/jp.2016.69 | **INTL** | **JUL TO DEC** | **PMID:**27123571 |
|  | Abiramalatha T(1), Sherba B(1), Joseph R(1), Thomas N(1).  Unusual complications of placental chorioangioma: consumption coagulopathy and hypertension in a preterm newborn.  BMJ Case Rep. 2016 May 6;2016. pii: bcr2016215734. doi: 10.1136/bcr-2016-215734.  **Author information:**  (1)Department of Neonatology, Christian Medical College, Vellore, Tamil Nadu, India.  We report a case of a preterm neonate born to a mother with giant placental chorioangioma. The baby had microangiopathic haemolytic anaemia, thrombocytopenia and cardiac failure at birth. In addition, she had a disseminated intravascular coagulation-like picture and had bleeding from multiple sites, which was treated with transfusion of multiple blood products. She also developed transient hypertension and required antihypertensive drugs for 3 weeks. The baby was successfully managed and discharged home, though with signs of neurosensoryimpairment. 2016 BMJ Publishing Group Ltd.DOI: 10.1136/bcr-2016-215734 | **INT** | **JAN TO JUN** | **PMID:**27154993 |
|  | Abraham G(1), Varughese S(2), Thandavan T(3), Iyengar A(4), Fernando E(5), Naqvi SA(6), Sheriff R(7), Ur-Rashid H(8), Gopalakrishnan N(9), Kafle RK(10).  Chronic kidney disease hotspots in developing countries in South Asia.  Clin Kidney J. 2016 Feb;9(1):135-41. doi: 10.1093/ckj/sfv109. Epub 2015 Nov 17.  **Author information:**  (1)Madras Medical Mission & Pondicherry Institute of Medical Science , Puducherry , India. (2)Christian Medical College , Vellore , India. (3)Tides IHMS , Chennai , India. (4)St. Johns Medical College , Bengaluru , India. (5)Stanley Medical College , Chennai , India. (6)The Kidney Foundation , Karachi , Pakistan. (7)University of Colombo , Colombo , Sri Lanka. (8)Kidney Foundation Hospital and Research Institute , Dhaka , Bangladesh. (9)Madras Medical College , Chennai , India. (10)National Kidney Center , Kathmandu , Nepal.  In many developing countries in the South Asian region, screening for chronic diseases in the community has shown a widely varying prevalence. However, certain geographical regions have shown a high prevalence of chronic kidney disease (CKD) of unknown etiology. This predominantly affects the young and middle-aged population with a lower socioeconomic status. Here, we describe the hotspots of CKD of undiagnosed etiology in South Asian countries including the North, Central and Eastern provinces of Sri Lanka and the coastal region of the state of AndhraPradesh in India. Screening of these populations has revealed cases of CKD in various stages. Race has also been shown to be a factor, with a much lower prevalence of CKD in whites compared to Asians, which could be related to the known influence of ethnicity on CKD development as well as environmental factors. The difference between developed and developing nations is most stark in the realm of healthcare, which translates into CKD hotspots in many regions of South Asian countries. Additionally, the burden of CKD stage G5 remains unknown due to the lack of registry reports, poor access to healthcare and lack of an organized chronic disease management program. The population receiving various forms of renal replacement therapy has dramatically increased in the last decade due to better access to point of care, despite the disproportionate increase in nephrology manpower. In this article we will discuss the nephrology care provided in various countries in South Asia, including India, Bangladesh, Pakistan, Nepal, Bhutan, Sri Lanka and Afghanistan. DOI: 10.1093/ckj/sfv109 | **INT** | **JAN TO JUN** | **PMCID: PMC**4720189  **PMID:**26798474 |
|  | Adcock DM(1), Mammen J(2), Nair SC(2), de Lima Montalvão SA(3).  Quality laboratory issues in bleeding disorders.  Haemophilia. 2016 Jul;22 Suppl 5:84-9. doi: 10.1111/hae.12991.  **Author information:**  (1)Colorado Coagulation, Laboratory Corporation of America® Holdings, Englewood, CO, USA. (2)Department of Transfusion Medicine and Immunohaematology, Christian Medical College, Vellore, Tamil Nadu, India. (3)IHTC Hemophilia Unit "Cláudio L. P. Corrêa", Instituto Nacional de Ciência e Tecnologia do Sangue, Hemocentro Unicamp, University of Campinas, São Paulo, Brazil.  Selected quality issues pertinent to the determination of accurate results in the haemostasis laboratory are discussed. Specifically, the implementation of a successful external quality-assessment scheme is described, including its impact on result accuracy as well as the programme's unique challenges and opportunities. Errors in the preanalytical phase of laboratory testing represent the greatest source for reporting incorrect test results. Some of the most common preanalytical errors are described including those that necessitate sample rejection. Analytical means to identify potential sources of error and analytical means to overcome particular interferences are described. Representing the most important clinical complication in the treatment of patients with haemophilia, quality issues related to determination of the presence of inhibitory antibodies against factor VIII (FVIII) are reviewed. Heat treatment of patient plasma prior to testing, particularly in patients receiving replacement FVIII concentrate or during induction of immune tolerance to achieve more accurate results is recommended, while screening activated partial thromboplastin time-based mixing tests to rule out inhibitor presence is discouraged. The initiatives presented in this review can be implemented in robust and resource restricted settings to improve the quality of laboratory testing in patients with bleeding disorders.© 2016 John Wiley & Sons Ltd.DOI: 10.1111/hae.12991 | **INT** | **JUL TO DEC** | **PMID:**27405682 |
|  | Adde L(1), Thomas N(2), John HB(3), Oommen S(4), Vågen RT(5), Fjørtoft T(6), Jensenius AR(7), Støen R(8).  Early motor repertoire in very low birth weight infants in India is associated with motor development at one year.  Eur J Paediatr Neurol. 2016 Nov;20(6):918-924. doi: 10.1016/j.ejpn.2016.07.019. Epub 2016 Jul 30.  **Author information:**(1)Department of Laboratory Medicine, Children's and Women's Health, Faculty of Medicine, Norwegian University of Science and Technology, P.O. Box 8905, 7491 Trondheim, Norway; Department of Physiotherapy, Clinic of Clinical Services, St. Olavs Hospital, Trondheim University Hospital, P.O. Box 3250 Sluppen, 7006 Trondheim, Norway. Electronic address: lars.adde@ntnu.no. (2)Department of Neonatology, Christian Medical College, IDA Scudder Rd, Vellore, Tamil Nadu 632004, India. Electronic address: niranjan@cmcvellore.ac.in. (3)Department of Neonatology, Christian Medical College, IDA Scudder Rd, Vellore, Tamil Nadu 632004, India. Electronic address: lilblessing14@gmail.com. (4)Department of Neonatology, Christian Medical College, IDA Scudder Rd, Vellore, Tamil Nadu 632004, India. Electronic address: docspo@gmail.com. (5)Department of Physiotherapy, Clinic of Clinical Services, St. Olavs Hospital, Trondheim University Hospital, P.O. Box 3250 Sluppen, 7006 Trondheim, Norway. Electronic address: Randi.Tynes.Vagen@stolav.no. (6)Department of Laboratory Medicine, Children's and Women's Health, Faculty of Medicine, Norwegian University of Science and Technology, P.O. Box 8905, 7491 Trondheim, Norway; Department of Physiotherapy, Clinic of Clinical Services, St. Olavs Hospital, Trondheim University Hospital, P.O. Box 3250 Sluppen, 7006 Trondheim, Norway. Electronic address: toril.fjortoft@ntnu.no. (7)Department of Musicology, University of Oslo, P.O. Box 1072 Blindern, 0316 Oslo, Norway. Electronic address: a.r.jensenius@imv.uio.no. (8)Department of Laboratory Medicine, Children's and Women's Health, Faculty of Medicine, Norwegian University of Science and Technology, P.O. Box 8905, 7491 Trondheim, Norway; Department of Pediatrics, St. Olavs Hospital, Trondheim University Hospital, P.O. Box 3250 Sluppen, 7006 Trondheim, Norway. Electronic address: ragnhild.stoen@ntnu.no.  BACKGROUND: Most studies on Prechtl's method of assessing General Movements (GMA) in young infants originate in Europe. AIM: To determine if motor behavior at an age of 3 months post term is associated with motor development at 12 months post age in VLBW infants in India. METHODS: 243 VLBW infants (135 boys, 108 girls; median gestational age 31wks, range 26-39wks) were video-recorded at a median age of 11wks post term (range 9-16wks). Certified and experienced observers assessed the videos by the "Assessment of Motor Repertoire - 2-5 Months". Fidgety movements (FMs) were classified as abnormal if absent, sporadic or exaggerated, and as normal if intermittently or continually present. The motor behaviour was evaluated by repertoire of co-existent other movements (age-adequacy) and concurrent motor repertoire. In addition, videos of 215 infants were analyzed by computer and the variability of the spatial center of motion (CSD) was calculated. The Peabody Developmental Motor Scales was used to assess motor development at 12 months. RESULTS: Abnormal FMs, reduced age adequacy, and an abnormal concurrent motor repertoire were significantly associated with lower Gross Motor and Total Motor Quotient (GMQ, TMQ) scores (p < 0.05). The CSD was higher in children with TMQ scores <90 (-1SD) than in children with higher TMQ scores (p = 0.002).CONCLUSION: Normal FMs (assessed by Gestalt perception) and a low variability of the spatial center of motion (assessed by computer-based video analysis) predicted higher Peabody scores in 12-month-old infants born in India with a very low birth weight. Copyright © 2016 European Paediatric Neurology Society. Published by Elsevier Ltd. All rights reserved. DOI: 10.1016/j.ejpn.2016.07.019 | **INT** | **JUL TO DEC** | **PMID:**27524392 |
|  | Agarwala MK(1), George R(1), Pramanik R(2), McGrath JA(2).  Olmsted syndrome in an Indian male with a new de novo mutation in TRPV3.  Br J Dermatol. 2016 Jan;174(1):209-11. doi: 10.1111/bjd.13910. Epub 2015 Nov 8.  **Author information:**  (1)Department of Dermatology, Christian Medical College, Vellore, Tamil Nadu, India. (2)St John's Institute of Dermatology, King's College London, London, U.K. DOI: 10.1111/bjd.13910 | **INTL** | **JAN TO JUN** | **PMID:**25989441 |
|  | Ahmed R(1), Devasia AJ(2), Viswabandya A(2), Lakshmi KM(2), Abraham A(2), Karl S(3), Mathai J(3), Jacob PM(4), Abraham D(4), Srivastava A(2), Mathews V(2), George B(5).  Long-term outcome following splenectomy for chronic and persistent immunethrombocytopenia (ITP) in adults and children : Splenectomy in ITP.  Ann Hematol. 2016 Sep;95(9):1429-34. doi: 10.1007/s00277-016-2738-3. Epub 2016 Jul 2.  **Author information:** (1)Department of Haematology, Rajiv Gandhi Cancer Institute & Research Centre, New Delhi, India. (2)Department of Haematology, Christian Medical College, Vellore, Tamil Nadu, India. (3)Department of Paediatric Surgery, Christian Medical College, Vellore, Tamil Nadu, India. (4)Department of General Surgery, Christian Medical College, Vellore, Tamil Nadu, India. (5)Department of Haematology, Christian Medical College, Vellore, Tamil Nadu, India. [biju@cmcvellore.ac.in](mailto:biju@cmcvellore.ac.in).  The purpose of this research is to study the outcomes of splenectomy for chronic and persistent immune thrombocytopenia (ITP). This study is a retrospective analysis of 254 patients with chronic or persistent ITP who underwent splenectomy at CMC, Vellore, India between 1995 and 2009. Responses were assessed based on standard criteria. One hundred and sixty seven adults and 87 children with a median age of 29 years (range 2-64) with persistent (n = 103) or chronic ITP (n = 151) was studied. Response was seen in 229 (90.2 %) including CR in 74.4 % at a median time of 1 day (range 1-54). Infections following splenectomy were reported in 16 %. Deaths related to post splenectomy sepsis occurred in 1.57 % and major bleeding in 0.78 %. At median follow-up of 54.3 months (range 1-290), 178 (70.1 %) remain in remission. The 5-year and 10-year overall survival (OS) is 97.4 ± 1.2 % and 94.9 ± 2.1 %, respectively, while the 5-year and 10-year event-free survival (EFS) is 76.5 + 2.9 % and 71.0 + 3.9 %, respectively. Splenectomy is associated with long-term remission rates of >70 % in chronic or persistent ITP. DOI: 10.1007/s00277-016-2738-3 | **INTL** | **JUL TO DEC** | **PMID:**27370992 |
|  | Alarcon Falconi TM(1), Kulinkina AV(1), Mohan VR(2), Francis MR(3), Kattula D(3),  Sarkar R(3), Ward H(4), Kang G(3), Balraj V(2), Naumova EN(5).  Quantifying tap-to-household water quality deterioration in urban communities in Vellore, India: The impact of spatial assumptions.  Int J Hyg Environ Health. 2017 Jan;220(1):29-36. doi: 10.1016/j.ijheh.2016.09.019. Epub 2016 Oct 3.  **Author information:**  (1)Department of Civil & Environmental Engineering, Tufts University, Medford, MA, USA. (2)Department of Community Health, Christian Medical College, Vellore, Tamil Nadu, India. (3)Division of Gastrointestinal Sciences, Christian Medical College, Vellore, Tamil Nadu, India. (4)Division of Gastrointestinal Sciences, Christian Medical College, Vellore, Tamil Nadu, India; Department of Geographic Medicine, Tufts Medical Center, Boston, MA, USA. (5)Department of Civil & Environmental Engineering, Tufts University, Medford, MA, USA; Division of Gastrointestinal Sciences, Christian Medical College, Vellore, Tamil Nadu, India; Friedman School of Nutrition Science & Policy, Tufts University, Boston, MA, USA.Electronic address: elena.naumova@tufts.edu.  Municipal water sources in India have been found to be highly contaminated, with further water quality deterioration occurring during household storage. Quantifying water quality deterioration requires knowledge about the exact source tap and length of water storage at the household, which is not usually known. This study presents a methodology to link source and household stored water, and explores the effects of spatial assumptions on the association between tap-to-household water quality deterioration and enteric infections in two semi-urban slums of Vellore, India. To determine a possible water source for each household sample, we paired household and tap samples collected on the same day using three spatial approaches implemented in GIS: minimum Euclidean distance; minimum network distance; and inverse network-distance weighted average. Logistic and Poisson regression models were used to determine associations between water quality deterioration and household-level characteristics, and between diarrheal cases and water quality deterioration. On average, 60% of households had higher fecal coliform concentrations in household samples than at source taps. Only the weighted average approach detected a higher risk of water quality deterioration for households that do not purify water and that have animals in the home (RR=1.50 [1.03, 2.18], p=0.033); and showed that households with water quality deterioration were more likely to report diarrheal cases (OR=3.08 [1.21, 8.18], p=0.02). Studies to assess contamination between source and household are rare due to methodological challenges and high costs associated with collecting paired samples. Our study demonstrated it is possible to derive useful spatial links between samples post hoc; and that the pairing approach affects the conclusions related to associations between enteric infections and water quality deterioration. Copyright Â© 2016 Elsevier GmbH. All rights reserved. DOI: 10.1016/j.ijheh.2016.09.019 | **INTL** | **JAN TO JUN** | **PMID:**27773615 |
|  | Alexander V(1), Sindhu KN(1), Zechariah P(1), Resu AV(1), Nair SR(1), Kattula D(2), Mohan VR(1), Alex T RG(3).  Occupational safety measures and morbidity among welders in Vellore, SouthernIndia.  Int J Occup Environ Health. 2016 Oct;22(4):300-306. Epub 2016 Sep 28.  **Author information:** (1)a Department of Community Health , Christian Medical College , Vellore , India. (2)b Division of GI Sciences , Christian Medical College , Vellore , India. (3)c Department of General Medicine , Christian Medical College , Vellore , India.  BACKGROUND: Welders in the unorganized occupational sector in the economically developing world are exposed to respiratory, skin, eye, ear, and neurological problems exacerbated by non-usage of personal protective equipment (PPE).  OBJECTIVE: To study the frequency of health problems and the usage of PPE among welders in unorganized welding units in Vellore, India. METHODS: A cross-sectional survey was conducted among 150 welders to determine the frequency of skin, ear, eye, and respiratory morbidity and the usage of PPE. A group of 150 non-welders were chosen for comparison.  RESULTS: Significant differences in the frequency of skin burns, redness, hyper pigmentation, itching, eye injuries, and sensorineural deafness were observed among the welders and non-welders (P < 0.001). Hypertension was noted in 12.6% of the welders as compared to 0.7% among the non-welders. None of the welders used appropriate PPE. For welders, low educational attainment was associated with an increased risk of eye injury (P < 0.05, OR = 0.29). There was also a significant difference between sensorineural deafness and a welder having less than 10 years of welding work experience (P < 0.001, OR = 18.18) which could probably be accounted for by the healthy worker effect. CONCLUSION: Welders in this sample experienced a significant skin, eye, and ear morbidity accentuated by the non-usage of PPE. All worked without formal training and were unaware of the safe working guidelines that exist, but are not implemented for the welders in India. DOI: 10.1080/10773525.2016.1228287 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5137558  **PMID:**27682579 |
|  | Ambikapathi R(1,)(2), Kosek MN(2), Lee GO(2), Mahopo C(3), Patil CL(4), Maciel  BL(5), Turab A(6), Islam MM(7), Ulak M(8), Bose A(9), Paredes Olortegui M(10),Pendergast LL(11), Murray-Kolb LE(12), Lang D(1), McCormick BJ(1), CaulfieldLE(13).  How multiple episodes of exclusive breastfeeding impact estimates of exclusivebreastfeeding duration: report from the eight-site MAL-ED birth cohort study.  Matern Child Nutr. 2016 Oct;12(4):740-56. doi: 10.1111/mcn.12352. Epub 2016 Aug 8.  **Author information:**(1)Fogarty International Center, National Institutes of Health, Bethesda, Maryland, USA. (2)Center for Human Nutrition, Department of International Health, The Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA.(3)Department of Nutrition, School of Health Sciences, University of Venda, Thohoyandou, Limpopo Province, South Africa. (4)Department of Women, Children and Family Health Science, College of Nursing, University of Illinois at Chicago, Chicago, Illinois, USA. (5)Department of Nutrition, State University of Ceará, Fortaleza, Ceará, Brazil. (6)Department of Paediatrics and Child Health, Aga Khan University, Karachi, Pakistan. (7)Centre for Nutrition and Food Security, International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh. (8)Department of Child Health and Institute of Medicine, Tribhuvan University, Kathmandu, Nepal. (9)Christian Medical College, Vellore, India. (10)Biomedical Investigations Unit AB PRISMA, Iquitos, Peru. (11)School Psychology Program, Temple University, Philadelphia, Pennsylvania, USA. (12)Department of Nutritional Sciences, The Pennsylvania State University, State College, Pennsylvania, USA. (13)Center for Human Nutrition, Department of International Health, The Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA. [lcaulfi1@jhu.edu](mailto:lcaulfi1@jhu.edu).  The duration of exclusive breastfeeding (EBF) is often defined as the time from birth to the first non-breast milk food/liquid fed (EBFLONG), or it is estimated by calculating the proportion of women at a given infant age who EBF in the previous 24 h (EBFDHS). Others have measured the total days or personal prevalence of EBF (EBFPREV), recognizing that although non-EBF days may occur, EBF can be re-initiated for extended periods. We compared breastfeeding metrics in the MAL-ED study; infants' breastfeeding trajectories were characterized from enrollment (median 7 days, IQR: 4, 12) to 180 days at eight sites. During twice-weekly surveillance, caretakers were queried about infant feeding the prior day. Overall, 101 833 visits and 356 764 child days of data were collected from 1957 infants. Median duration of EBFLONG was 33 days (95% CI: 32-36), compared to 49 days based on the EBFDHS. Median EBFPREV was 66 days (95% CI: 62-70). Differences were because of the return to EBF after a non-EBF period. The median number of returns to EBF was 2 (IQR: 1, 3). When mothers re-initiated EBF (second episode), infants gained an additional 18.8 days (SD: 25.1) of EBF, and gained 13.7 days (SD: 18.1) (third episode). In settings where women report short gaps in EBF, programmes should work with women to return to EBF. Interventions could positively influence the duration of these additional periods of EBF and their quantification should be considered in impact evaluation studies. © 2016 John Wiley & Sons Ltd. © 2016 The Authors. Maternal & Child Nutrition published by John Wiley & Sons Ltd. DOI: 10.1111/mcn.12352 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5095788  **PMID:**27500709 |
|  | Amirtharaj GJ(1), Natarajan SK(1), Pulimood A(1), Balasubramanian KA(1), Venkatraman A(2), Ramachandran A(3).  Role of Oxygen Free Radicals, Nitric Oxide and Mitochondria in Mediating CardiacAlterations During Liver Cirrhosis Induced by Thioacetamide.  Cardiovasc Toxicol. 2016 Apr 30. [Epub ahead of print]  **Author information:**  (1)The Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences, Christian Medical College, Ida Scudder Road, Vellore, 632004, India. (2)Center for Stem Cell Research, Christian Medical College, Ida Scudder Road, Vellore, 632004, India. (3)The Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences, Christian Medical College, Ida Scudder Road, Vellore, 632004, India. wellcome@cmcvellore.ac.in.  Thioacetamide (TAA) administration is widely used for induction of liver cirrhosis in rats, where reactive oxygen radicals (ROS) and nitric oxide (NO) participate in development of liver damage. Cardiac dysfunction is an important complication of liver cirrhosis, but the role of ROS or NO in cardiac abnormalities during liver cirrhosis is not well understood. This was investigated in animals after TAA-induced liver cirrhosis and temporal changes in oxidative stress, NO and mitochondrial function in the heart evaluated. TAA induced elevation in cardiac levels of nitrate before development of frank liver cirrhosis, without gross histological alterations. This was accompanied by an early induction of P38 MAP kinase, which is influenced by ROS and plays an important signaling role for induction of iNOS. Increased nitrotyrosine, protein oxidation and lipid peroxidation in the heart and cardiac mitochondria, suggestive of oxidative stress, also preceded frank liver cirrhosis. However, compromised cardiac mitochondrial function with a decrease in respiratory control ratio and increased mitochondrial swelling was seen later, when cirrhosis was evident. In conclusion, TAA induces elevations in ROS and NO in the heart in parallel to early liver damage. This leads to later development of functional deficits in cardiac mitochondria after development of liver cirrhosis. DOI: 10.1007/s12012-016-9371-1 | **INTL** | **JAN TO JUN** | **PMID:**27131982 |
|  | Amour C, Gratz J, Mduma E, Svensen E, Rogawski ET, McGrath M, Seidman JC,McCormick BJ, Shrestha S, Samie A, Mahfuz M, Qureshi S, Hotwani A, Babji S,Trigoso DR, Lima AA, Bodhidatta L, Bessong P, Ahmed T, Shakoor S, Kang G, KosekM, Guerrant RL, Lang D, Gottlieb M, Houpt ER, Platts-Mills JA;  Epidemiology and Impact of Campylobacter Infection in Children in 8 Low-Resource Settings: Results From the MAL-ED Study.Etiology, Risk Factors, and Interactions of Enteric Infections and Malnutrition and the Consequences for Child Health and Development Project (MAL-ED) Network Investigators.  Clin Infect Dis. 2016 Nov 1;63(9):1171-1179. Epub 2016 Aug 7.  **Collaborators:** Acosta AM, de Burga RR, Chavez CB, Flores JT, Olotegui MP, Pinedo SR, Salas MS, Trigoso DR, Vasquez AO, Ahmed I, Alam D, Ali A, Bhutta ZA, Qureshi S, Rasheed M, Soofi S, Turab A, Zaidi AK, Bodhidatta L, Mason CJ, Babji S, Bose A, George AT, Hariraju D, Jennifer MS, John S, Kaki S, Kang G, Karunakaran P, Koshy B, Lazarus RP, Muliyil J, Raghava MV, Raju S, Ramachandran A, Ramadas R, Ramanujam K, Rose A, Roshan R, Sharma SL, Sundaram S, Thomas RJ, Pan WK, Ambikapathi R, Carreon JD, Charu V, Doan V, Graham J, Hoest C, Knobler S, Lang DR, McCormick BJ, McGrath M, Miller MA, Mohale A, Nayyar G, Psaki S, Rasmussen Z, Richard SA, Seidman JC, Wang V, Blank R, Gottlieb M, Tountas KH, Amour C, Bayyo E, Mduma ER, Mvungi R, Nshama R, Pascal J, Swema BM, Yarrot L, Ahmed T, Ahmed AM, Haque R, Hossain I, Islam M, Mahfuz M, Mondal D, Tofail F, Chandyo RK, Shrestha PS, Shrestha R, Ulak M, Bauck A, Black R, Caulfield L, Checkley W, Kosek MN, Lee G, Schulze K, Yori PP, Murray-Kolb LE, Ross AC, Schaefer B, Simons S, Pendergast L, Abreu CB, Costa H, Di Moura A, Filho JQ, Havt A, Leite ÁM, Lima AA, Lima NL, Lima IF, Maciel BL, Medeiros PH, Moraes M, Mota FS, Oriá RB, Quetz J, Soares AM, Mota RM, Patil CL, Bessong P, Mahopo C, Maphula A, Nyathi E, Samie A, Barrett L, Dillingham R, Gratz J, Guerrant RL, Houpt E, Petri WA Jr, Platts-Mills J, Scharf R, Shrestha B, Shrestha SK, Strand T, Svensen E.  Enteropathogen infections have been associated with enteric BACKGROUND: dysfunction and impaired growth in children in low-resource settings. In a multisite birth cohort study (MAL-ED), we describe the epidemiology and impact of Campylobacter infection in the first 2 years of life. Children were actively followed up until 24 months of age. Diarrheal METHODS: and nondiarrheal stool samples were collected and tested by enzyme immunoassay for Campylobacter Stool and blood samples were assayed for markers of intestinal permeability and inflammation. A total of 1892 children had 7601 diarrheal and 26 267 nondiarrheal RESULTS: stool samples tested for Campylobacter We describe a high prevalence of infection, with most children (n = 1606; 84.9%) having a Campylobacter-positive stool sample by 1 year of age. Factors associated with a reduced risk of Campylobacter detection included exclusive breastfeeding (risk ratio, 0.57; 95% confidence interval, .47-.67), treatment of drinking water (0.76; 0.70-0.83), access to an improved latrine (0.89; 0.82-0.97), and recent macrolide antibiotic use (0.68; 0.63-0.74). A high Campylobacter burden was associated with a lower length-for-age Z score at 24 months (-1.82; 95% confidence interval, -1.94 to -1.70) compared with a low burden (-1.49; -1.60 to -1.38). This association was robust to confounders and consistent across sites. Campylobacter infection was also associated with increased intestinal permeability and intestinal and systemic inflammation. Campylobacter was prevalent across diverse settings and associated CONCLUSIONS: with growth shortfalls. Promotion of exclusive breastfeeding, drinking water treatment, improved latrines, and targeted antibiotic treatment may reduce the burden of Campylobacter infection and improve growth in children in these settings. © The Author 2016. Published by Oxford University Press for the Infectious Diseases Society of America. DOI: 10.1093/cid/ciw542 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5064165  **PMID:**27501842 |
|  | Antonisamy B(1), Vasan SK(2), Geethanjali FS(3), Gowri M(1), Hepsy YS(1), RichardJ(1), Raghupathy P(4), Karpe F(5), Osmond C(6), Fall CH(6).  Weight Gain and Height Growth during Infancy, Childhood, and Adolescence asPredictors of Adult Cardiovascular Risk.  [J Pediatr.](https://www.ncbi.nlm.nih.gov/pubmed/?term=Weight+Gain+and+Height+Growth+during+Infancy%2C+Childhood%2C+and+Adolescence+as+Predictors+of+Adult+Cardiovascular+Risk.) 2017 Jan;180:53-61.e3. doi: 10.1016/j.jpeds.2016.09.059. Epub 2016 Nov 4.  **Author information:**(1)Department of Biostatistics, Christian Medical College, Vellore, India. (2)Oxford Center for Diabetes, Endocrinology, and Metabolism, University of Oxford, Oxford, United Kingdom. Electronic address: [senthil.vasan@ocdem.ox.ac.uk](mailto:senthil.vasan@ocdem.ox.ac.uk). (3)Department of Clinical Biochemistry, Christian Medical College, Vellore, India. (4)Department of Child Health, Christian Medical College, Vellore, India. (5)Oxford Center for Diabetes, Endocrinology, and Metabolism, University of Oxford, Oxford, United Kingdom; National Institute for Health Research Oxford Biomedical Research Centre, Oxford University Hospital, Oxford, United Kingdom. (6)Medical Research Council Lifecourse Epidemiology Unit, University of Southampton, Southampton, United Kingdom.  OBJECTIVES: To investigate independent relationships of childhood linear growth (height gain) and relative weight gain to adult cardiovascular disease (CVD) risk traits in Asian Indians. STUDY DESIGN: Data from 2218 adults from the Vellore Birth Cohort were examined for associations of cross-sectional height and body mass index (BMI) and longitudinal growth (independent conditional measures of height and weight gain) in infancy, childhood, adolescence, and adulthood with adult waist circumference (WC), blood pressure (BP), insulin resistance (homeostatic model assessment-insulin resistance [HOMA-IR]), and plasma glucose and lipid concentrations. RESULTS: Higher BMI/greater conditional relative weight gain at all ages was associated with higher adult WC, after 3 months with higher adult BP, HOMA-IR, and lipids, and after 15 years with higher glucose concentrations. Taller adult height was associated with higher WC (men β = 2.32 cm per SD, women β = 1.63, both P < .001), BP (men β = 2.10 mm Hg per SD, women β = 1.21, both P ≤ .001), and HOMA-IR (men β = 0.08 log units per SD, women β = 0.12, both P ≤ .05) but lower glucose concentrations (women β = -0.03 log mmol/L per SD P = .003). Greater height or height gain at all earlier ages were associated with higher adult CVD risk traits. These positive associations were attenuated when adjusted for adult BMI and height. Shorter length and lower BMI at birth were associated with higher glucose concentration in women. CONCLUSIONS: Greater height or weight gain relative to height during childhood or adolescence was associated with a more adverse adult CVD risk marker profile, and this was mostly attributable to larger adult size. Copyright © 2016 The Authors. Published by Elsevier Inc. All rights reserved. DOI: 10.1016/j.jpeds.2016.09.059 | **INT** | **JUL TO DEC** | **PMID:**27823768 |
|  | Anuradha C(1), Manipadam MT(2), Asha HS(3), Dukhabandhu N(3), Abraham D(4), PaulMJ(4).  Can New Ultrasound Signs Help in Identifying Follicular Variant of PapillaryCarcinoma of Thyroid? - A Pilot Study.  Ultrasound Int Open. 2016 May;2(2):E47-53. doi: 10.1055/s-0036-1582304. Epub 2016Apr 28.  **Author information:**  (1)Radiology, Christian Medical College, Vellore, India. (2)Pathology, ChristianMedical College, Vellore, India. (3)Endocrinology, Christian Medical College,Vellore, India. (4)Endocrine Surgery, Christian Medical College, Vellore, India.  AIM: To describe two new ultrasound signs for thyroid nodules - "nodule innodule" and "hypoechoic internal septae" and assess their usefulness indifferentiating follicular variant of papillary thyroid carcinoma (FVPTC) frombenign thyroid nodules (BTN).METHODOLOGY: Ultrasound findings of 210 patients with histopathologically provenFVPTC (68 nodules, M:F=13:47 with mean age of 39.5±11.9 years) and BTN (165nodules, (M:F=41:109 with mean age of 44±11.3 years) were retrospectivelyreviewed from PACS by a single radiologist blinded to the final diagnosis.Logistic regression analysis was performed to identify the best predictors ofFVPTC and their diagnostic performance was assessed.RESULTS: The "nodule in nodule" sign was seen in 80.9% of FVPTC and only 12.1% ofBTN. The "hypoechoic internal septae" sign was seen in 44.1% of FVPTC and 17% ofBTN. Younger patients, heterogeneous echotexture, nodule in nodule sign, thickincomplete non-uniform halo and presence of significant nodes were the bestpredictors of FVPTC (p<0.05). The sensitivity, specificity, positive predictivevalue, negative predictive value, accuracy and relative risk for FVPTC given asodds ratio (95% CI) for heterogeneous echotexture and nodule in nodule sign whichwere the best 2 predictors of FVPTC were 91.2%, 81.8%, 67.3%, 95.7%, 84.5%, 46.5(18.5-117.4) and 80.9%, 87.7%, 74.3%, 91.2%, 86.2%, 32.5 (15.04-70.2),respectively. There was improvement in the specificity (91.5%) and accuracy(86.6%) when a combined criterion of heterogeneous echotexture and nodule innodule sign was applied to predict FVPTC.CONCLUSION: The "nodule in nodule" sign is common in FVPTC and when combined withheterogeneous echotexture can differentiate FVPTC and BTN with high specificity. DOI: 10.1055/s-0036-1582304 | **INTL** | **JAN TO JUN** | **PMID:**27689170 |
|  | Arora R(1), George AJ(1), Eapen A(2), Devasia A(1).  Carcinoma prostate masquerading as a hemorrhagic pelvic cyst.  Int Braz J Urol. 2016 Nov 2. doi: 10.1590/S1677-5538.IBJU.2015.0207. [Epub aheadof print]  **Author information:** (1)Department of Internal Medicine, Christian Medical College Hospital, Vellore,Tamil Nadu, India. Electronic address: dr.shalabharora@gmail.com. (2)Departmentof Internal Medicine, Christian Medical College Hospital, Vellore, Tamil Nadu,India. | **INTL** | **JUL TO DEC** | **PMCID: PMC**5032849  **PMID:**27802006 |
|  | Arumugam R(1), Rai E(2), Ancheri S(2), Thulasiraman R(3).  Unusually narrow caudal space with undue resistance to drug injection in acongenital adrenal hyperplasia child.  Paediatr Anaesth. 2016 Nov;26(11):1117-1118. doi: 10.1111/pan.12962.  **Author information:** (1)Department of Anaesthesia, Christian Medical College, Vellore, Tamil Nadu,India. sendmailtodrrajasekar@gmail.com. (2)Department of Anaesthesia, ChristianMedical College, Vellore, Tamil Nadu, India. (3)Department of Anaesthesia,Government Vellore Medical College, Vellore, Tamil Nadu, India. | **INTL** | **JUL TO DEC** | **PMID:**27747980 |
|  | Arun AK(1), Senthamizhselvi A(1), Mani S(1), Vinodhini K(1), Janet NB(1), Lakshmi KM(1), Abraham A(1), George B(1), Srivastava A(1), Srivastava VM(2), Mathews V(1), Balasubramanian P(1).  Frequency of rare BCR-ABL1 fusion transcripts in chronic myeloid leukemia patients.  Int J Lab Hematol. 2016 Dec 29. doi: 10.1111/ijlh.12616. [Epub ahead of print]  **Author information:**  (1)Department of Haematology, Christian Medical College, Vellore, India. (2)Cytogenetics Unit, Christian Medical College, Vellore, India.  INTRODUCTION: The hallmark of chronic myeloid leukemia (CML) is the presence of Philadelphia chromosome, its resultant fusion transcript (BCR-ABL1), and fusion protein (p210). Alternate breakpoints in BCR (m-bcr, μ-bcr, and others) or ABL1 result in the expression of few rare fusion transcripts (e19a2, e1a2, e13a3, e14a3) and fusion proteins (p190, p200, p225) whose exact clinical significance remains to be determined. METHODS: Our study was designed to determine the type and frequency of BCR-ABL1 fusion transcripts in 1260 CML patients and to analyze the prognosis and treatment response in patients harboring rare BCR-ABL1 fusion transcripts. RESULTS: The frequency of various BCR-ABL1 fusion transcripts was as follows: e14a2 (60%), e13a2 (34.3%), e1a2 (1.2%), e1a2 + e13a2 (2.0%), e1a2 + e14a2 (1.8%), e19a2 (0.3%), and e14a3 (0.3%). CML patients with e1a2 transcripts had higher rates of disease progression, resistance, or suboptimal response to imatinib and failed to achieve major molecular response. CONCLUSION: Characterization of the specific fusion transcript in CML patients is important owing to the difference in prognosis and response to therapy in addition to the conventional need for monitoring treatment response. CML patients with e1a2 transcripts have to be closely monitored due to the high incidence of disease progression and treatment resistance/failure.  © 2016 John Wiley & Sons Ltd. DOI: 10.1111/ijlh.12616 | **INT** | **JUL TO DEC** | PMID: 28035733 |
|  | Arun S(1), Kumar M(2), Ross BJ(1).  ediastinal bronchogenic cyst mimicking congenital lobar emphysema.  BMJ Case Rep. 2016 Sep 8;2016. pii: bcr2016216704. doi: 10.1136/bcr-2016-216704.  **Author information:** (1)Department of Neonatology, Christian Medical College and Hospital Vellore,Vellore, Tamil Nadu, India. (2)Department of Neonatology, Christian MedicalCollege, Vellore, Tamil Nadu, India.Bronchogenic cyst (BC) is a rare congenital malformation of the lung. Mostpatients remain asymptomatic until adulthood while some are symptomatic in thefirst few years of life. However, symptoms in newborn period are rare. We reporta case of a 3-day-old preterm baby with respiratory distress diagnosed ascongenital lobar emphysema on chest X-ray. A CT scan revealed a mediastinal cystcausing obstructive lobar emphysema. | **INTL** | **JUL TO DEC** | **PMID:**27609589 |
|  | Awadhalla MS(1), Asokan GV(2), Matooq A(3), Kirubakaran R(4  Declining trends in injuries and ambulance calls for road traffic crashes in  Bahrain post new traffic laws of 2015.  [J Epidemiol Glob Health.](https://www.ncbi.nlm.nih.gov/pubmed/26994440) 2016 Jun;6(2):59-65. doi: 10.1016/j.jegh.2016.02.004. Epub 2016 Mar 16.  **Author information:**  (1)University of Bahrain, College of Health Sciences, Nursing Department-WHOCollaborating Centre for Nursing Development, P.O. Box: 32038, Salmanya, Bahrain.Electronic address: msabri@uob.edu.bh. (2)College of Health Sciences, Universityof Bahrain, PO Box 32038, Salmanya, Bahrain. (3)International Training Centre,WHO Collaborating Centre for Nursing Development, College of Health Sciences,University of Bahrain, PO Box 32038, Salmanya, Bahrain. (4)South Asian CochraneCenter and Network, Christian Medical College, Vellore, Tamil Nadu, India.Road traffic crashes (RTC) are of serious global health concern. To identifywhether the number of ambulance calls, injuries, and deaths has declined afterthe implementation of the new traffic law (NTL) 2015 in Bahrain, de-identifiedadministrative RTC data obtained from the tertiary care center, and the GeneralDirectorate of Traffic (GDT) of Bahrain were used. A quasi-experimental designwas employed to trend the impact of the NTL on RTC and associated healthcareevents. Bahrainis and non-Bahrainis who met with RTC, either in a vehicle or as apedestrian, between February 8 and May 8 in 2013, 2014 (pre NTL), and 2015 (postNTL) were included in the study. Our results show a reduction in the number ofambulance calls from vehicular and pedestrian RTC victims. The ambulance callsfrom pedestrian RTC victims were <10% compared to the number of ambulance callsfrom vehicular RTC victims. There was a significant reduction in minor injuriespost 2015, whereas no obvious difference was seen for serious injuries anddeaths. A longer follow-up study to confirm the sustained decline in RTCenforcing a zero tolerance policy toward traffic transgressions, and raisingpublic awareness on the "critical four minutes" and "golden hour" is recommended.Copyright © 2016 Ministry of Health, Saudi Arabia. Published by Elsevier Ltd. Allrights reservedDOI: 10.1016/j.jegh.2016.02.004 | **INTL** | **JAN TO JUN** | **PMID:**26994440 |
|  | Azad K(1), Mathews J(2).  Preventing newborn deaths due to prematurity  Best Pract Res Clin Obstet Gynaecol. 2016 Oct;36:131-144. doi:10.1016/j.bpobgyn.2016.06.001. Epub 2016 Jun 24.  **Author information:** (1)Perinatal Care Project, Diabetic Association of Bangladesh, 122 Kazi NazrulIslam Avenue, Dhaka 1000, Bangladesh. Electronic address: kishwar.azad@gmail.com(2)Department of Obstetrics & Gynaecology, Christian Medical College, Ida ScudderRoad, Vellore 632 004, India.Preterm births (PTBs), defined as births before 37 weeks of gestation account forthe majority of deaths in the newborn period. Prediction and prevention of PTB ischallenging. A history of preterm labour or second trimester losses and accuratemeasurement of cervical length help to identify women who would benefit fromprogesterone and cerclage. Fibronectin estimation in the cervicovaginalsecretions of a symptomatic woman with an undilated cervix can predict PTB within10 days of testing. Antibiotics should be given to women with preterm prelabourrupture of membranes but tocolysis has a limited role in the management ofpreterm labour. Antenatal corticosteroids to prevent complications in the neonateshould be given only when gestational age assessment is accurate PTB isconsidered imminent, maternal infection and the preterm newborn can receiveadequate care. Magnesium sulphate for fetal neuroprotection should be given whendelivery is imminent. After birth, most babies respond to simple interventionsessential newborn care, basic care for feeding support, infections and breathingdifficulties. Newborns weighing 2000 g or less, benefit from KMC. Babies, who areclinically unstable or cannot be given KMC may be nursed in an incubator or undera radiant warmer. Treatment modalities include oxygen therapy, CPAP, surfactantand assisted ventilation.Copyright © 2016. Published by Elsevier L | **INTL** | **JUL TO DEC** | **PMID:**27545716 |
|  | Bajpai R(1), Chaturvedi H(2), Jayaseelan L(3), Harvey P(4), Seguy N(5), Chavan  L(5), Raj P(6), Pandey A(2).  Effects of Antiretroviral Therapy on the Survival of Human ImmunodeficiencyVirus-positive Adult Patients in Andhra Pradesh, India: A Retrospective CohortStudy, 2007-2013. [J Prev Med Public Health.](https://www.ncbi.nlm.nih.gov/pubmed/27951632) 2016 Nov;49(6):394-405. Epub 2016 Oct 28.  **Author information:** (1)Department of Community Medicine, Army College of Medical Sciences, New Delhi,India. (2)National Institute of Medical Statistics, New Delhi, India. (3)Department of Biostatistics, Christian Medical College, Vellore, India.(4)Division of Global HIV/AIDS, Centers for Disease Control and Prevention, NewDelhi, India. (5)World Health Organization Country Office for India, New Delhi,India. (6)National AIDS Control Organization, New Delhi, India.OBJECTIVES: The survival outcomes of antiretroviral treatment (ART) programs havenot been systematically evaluated at the state level in India. This retrospectivestudy assessed the survival rates and factors associated with survival amongadult human immunodeficiency virus (HIV)-infected patients in Andhra Pradesh,India.METHODS: The present study used data from 139 679 HIV patients aged ≥15 years onART who were registered from 2007 to 2011 and were followed up through December2013. The primary end point was death of the patient. Mortality densities (per1000 person-years) were calculated. Kaplan-Meier and Cox-regression models wereused to estimate survival and explore the factors associated with survival.RESULTS: The overall median follow-up time was 16.0 months (2.0 months for thedeceased and 14.0 months for those lost to follow-up). Approximately 13.2% ofthose newly initiated on ART died during follow-up. Of those deaths, 56% occurredin the first three months. The crude mortality rate was 80.9 per 1000person-years at risk. The CD4 count (adjusted hazard ratio [aHR],4.88; 95%confidence interval [CI], 4.36 to 5.46 for <100 cells/mm(3) vs. >350cells/mm(3)), functional status (aHR, 3.05; 95% CI, 2.82 to 3.30 for bedriddenvs. normal), and body weight (aHR, 3.69; 95% CI, 3.42 to 3.97 for <45 kg vs. >60kg) were strongly associated with the survival of HIV patients.CONCLUSIONS: The study findings revealed that high mortality was observed withinthe first three months of ART initiation. Patients with poor baseline clinicalcharacteristics had a higher risk of mortality. Expanded testing and counselingshould be encouraged, with the goal of ensuring early enrollment into the programfollowed by the initiation of ART in HIV-infected patients.DOI: 10.3961/jpmph.16.073 | **INT** | **JUL TO DEC** | **PMID:**27951632 |
|  | Bakthavatchalam YD(1), Pragasam AK, Anandan S, Joshi S, Chaudhuri BN, Chitnis DS,  Roy I, Tapan D, Veeraraghavan B.  Comparative in-vitro activity of ceftaroline against Staphylococcus aureusiso  J Infect Dev Ctries. 2016 Jan 31;10(1):109-12. doi: 10.3855/jidc.7196ates from India  **Author information:**  (1)Christian Medical College, Vellore, India. cilviamicrovin@gmail.com. | **INTL** | **JAN TO JUN** | **PMID:**26829546 |
|  | Bal SK(1), Gupta R, Vimala LR, Paul A, Thangakunam B, Christopher DJ.  A Curious Case of a Low-Protein Pleural Effusion.  J Bronchology Interv Pulmonol. 2016 Jul;23(3):e23-4. doi:  10.1097/LBR.0000000000000280.  **Author information:**(1)Departments of JUL TO DECPulmonary Medicine †Radiology, Christian Medical CollegeVellore, Tamil Nadu, India.DOI: 10.1097/LBR.0000000000000280 | **INTL** | **JUL TO DEC** | **PMID:**27454476 |
|  | Bal SK(1), Thangakunam B, Irodi A, Gupta M, Christopher DJ.  Small Sample Lung Biopsy Findings in Patients With Clinicoradiologic Suspicion ofPulmonary Venoocclusive Disease-Pulmonary Capillary Hemangiomatosis.  J Bronchology Interv Pulmonol. 2016 Oct;23(4):308-315.  **Author information:** (1)Departments of JUL TO DECPulmonary Medicine †Radiology ‡General Pathology, ChristianMedical College, Vellore, Tamil Nadu, India.Pulmonary venoocclusive disease (PVOD) and pulmonary capillary hemangiomatosis(PCH) form a sinister subgroup of pulmonary arterial hypertension where thepredominant pathology lies in the pulmonary veins and capillaries, thus makingthe use of pulmonary vasodilators potentially dangerous in these patientsRadiologically, the presence of centrilobular nodules, interlobular septalthickening, and significant mediastinal adenopathy are useful in identifying thissubgroup from patients with pulmonary arterial hypertension. The combination ofall three has a sensitivity of 66% and a specificity of 100% in identifying thissubgroup. We present a case series of 3 patients who were radiologicallysuspected to have PVOD or PCH and in whom pathologic corroborative evidencesuggestive of PVOD and PCH was found in small sample lung biopsy specimens:transbronchial lung biopsy (2 patients) and trucut biopsy of the postmortem lung(1 patient). Histopathology, in our patients, showed pulmonary arteriole smoothmuscle proliferation and narrowing, capillary proliferation, intimal fibrosis ofpulmonary veins and arteries, interstitial fibrosis, interstitial foreign bodytype of multinucleate giant cells, and aggregates of alveolar and interstitialhemosiderophages. In conclusion, histopathology of small lung biopsy samples canprovide useful corroborative pathologic evidence in patients withclinicoradiologic suspicion of PVOD-PCH.OI: 10.1097/LBR.0000000000000320 | **INTL** | **JUL TO DEC** | **PMID:**27623416 |
|  | Balekuduru A(1), Dutta AK(2), Subbaraj SB(1).  Endoscopic ultrasound-guided transoral drainage of parapharyngeal abscess.  Dig Endosc. 2016 Nov;28(7):756. doi: 10.1111/den.12696. Epub 2016 Aug 8.  **Author information:** (1)Department of Gastroenterology, Christian Medical College, Vellore, Tamilnadu,India. (2)Department of Gastroenterology, M.S. Ramaiah Memorial HospitalsBangalore, Karnataka, India.DOI: 10.1111/den.12696 | **INTL** | **JUL TO DEC** | **PMID:**27411396 |
|  | Ballen K(1), Woo Ahn K(2), Chen M(3), Abdel-Azim H(4), Ahmed I(5), Aljurf M(6),Antin J(7), Bhatt AS(8), Boeckh M(9), Chen G(10), Dandoy C(11), George B(12),Laughlin MJ(13), Lazarus HM(14), MacMillan ML(15), Margolis DA(16), Marks DI(17),Norkin M(18), Rosenthal J(19), Saad A(20), Savani B(21), Schouten HC(22), StorekJ(23), Szabolcs P(24), Ustun C(25), Verneris MR(15), Waller EK(26), WeisdorfDJ(25), Williams KM(27), Wingard JR(18), Wirk B(28), Wolfs T(29), Young JA(15),Auletta J(30), Komanduri KV(31), Lindemans C(32), Riches ML(33).  Infection Rates among Acute Leukemia Patients Receiving Alternative DonorHematopoietic Cell Transplantation.  Biol Blood Marrow Transplant. 2016 Sep;22(9):1636-45. doi:10.1016/j.bbmt.2016.06.012. Epub 2016 Jun 22.  **Author information:** (1)Division of Hematology/Oncology, Massachusetts General Hospital,Boston,Massachusetts. Electronic address: kballen@partners.org. (2)Center forInternational Blood and Marrow Transplant Research, Department of Medicine,Medical College of Wisconsin, Milwaukee, Wisconsin; Division of Biostatistics,Institute for Health and Society, Medical College of Wisconsin, Milwaukee,Wisconsin. (3)Center for International Blood and Marrow Transplant Research,Department of Medicine, Medical College of Wisconsin, Milwaukee, Wisconsin.(4)Division of Hematology, Oncology, and Blood and Marrow Transplantation,Children's Hospital Los Angeles, University of Southern California Keck School ofMedicine, Los Angeles, California. (5)Department of Hematology, Oncology and BoneMarrow Transplantation, The Children's Mercy Hospitals and Clinics, Kansas City,Missouri. (6)Department of Oncology, King Faisal Specialist Hospital Center andResearch, Riyadh, Saudi Arabia. (7)Center for Hematologic Oncology, Department ofMedical Oncology, Dana-Farber Cancer Institute, Boston, Massachusetts.(8)Stanford University School of Medicine, Stanford, California. (9)Vaccine andInfectious Disease Division, Fred Hutchinson Cancer Research Center, Seattle,Washington. (10)Department of Medicine, Roswell Park Cancer Institute, Buffalo,New York. (11)Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio.(12)Christian Medical College, Vellore, India. (13)Medical Director, ClevelandCord Blood Center, Cleveland, Ohio. (14)Seidman Cancer Center, UniversityHospitals Case Medical Center, Cleveland, Ohio. (15)Division of Blood and MarrowTransplantation, Department of Pediatrics, University of Minnesota, Minneapolis,Minnesota. (16)Section of Hematology, Oncology and BMT, Department of Pediatrics,Medical College of Wisconsin, Milwaukee, Wisconsin. (17)Pediatric Bone MarrowTransplant, University Hospitals Bristol NHS Trust, Bristol, United Kingdom.(18)Division of Hematology/Oncology, University of Florida College of Medicine,Gainesville, Florida. (19)City of Hope National Medical Center, Duarte,California. (20)Division of Hematology/Oncology Department of Medicine,University of Alabama at Birmingham, Birmingham, Alabama. (21)Division ofHematology/Oncology, Department of Medicine, Vanderbilt University MedicalCente, Nashville, Tennessee. (22)Department of Hematology, AcademischeZiekenhuis, Maastricht, Netherlands. (23)Department of Medicine, University ofCalgary, Calgary, Alberta, Canada. (24)Division of Blood and MarrowTransplantation, Children's National Health System, Washington, District ofColumbia. (25)Division of Hematology, Oncology and Transplantation, Department ofMedicine, University of Minnesota Medical Center, Minneapolis, Minnesota(26)Department of Hematology and Medical Oncology, Winship Cancer Institute,Emory University, Atlanta, Georgia. (27)Experimental Transplantation andImmunology Branch, National Cancer Institute, National Institute of Health,Bethesda, Maryland. (28)Division of Bone Marrow Transplant, Seattle Cancer CareAlliance, Seattle, Washington. (29)Division of Pediatrics, Wilhelmina Children'sHospital, Utrecht, Netherlands. (30)Host Defense Program, Divisions ofHematology/Oncology/Bone Marrow Transplant and Infectious Diseases, NationwideChildren's Hospital, Columbus, Ohio. (31)Adult Stem Cell Transplantation Program,University of Miami, Miami, Florida. (32)Pediatric Blood and MarrowTransplantation Program, University Medical Center Utrecht, Utrecht, Netherlands.(33)Division of Hematology/Oncology, University of North Carolina at Chapel Hill,Chapel Hill, North Carolina.Alternative graft sources (umbilical cord blood [UCB], matched unrelated donors[MUD], or mismatched unrelated donors [MMUD]) enable patients without a matchedsibling donor to receive potentially curative hematopoietic cell transplantation(HCT). Retrospective studies demonstrate comparable outcomes among differentgraft sources. However, the risk and types of infections have not been comparedamong graft sources. Such information may influence the choice of a particlargraft source. We compared the incidence of bacterial, viral, and fungalinfections in 1781 adults with acute leukemia who received alternative donor HCT(UCB, n= 568; MUD, n = 930; MMUD, n = 283) between 2008 and 2011. The incidencesof bacterial infection at 1 year were 72%, 59%, and 65% (P < .0001) for UCB, MUD,and MMUD, respectively. Incidences of viral infection at 1 year were 68%, 45%,and 53% (P < .0001) for UCB, MUD, and MMUD, respectively. In multivariableanalysis, bacterial, fungal, and viral infections were more common after eitherUCB or MMUD than after MUD (P < .0001). Bacterial and viral but not fungalinfections were more common after UCB than MMUD (P = .0009 and <.0001,respectively). The presence of viral infection was not associated with anincreased mortality. Overall survival (OS) was comparable among UCB and MMUDpatients with Karnofsky performance status (KPS) ≥ 90% but was inferior for UCBfor patients with KPS < 90%. Bacterial and fungal infections were associated withpoorer OS. Future strategies focusing on infection prevention and treatment areindicated to improve HCT outcomes.  Copyright © 2016 The American Society for Blood and Marrow TransplantationPublished by Elsevier Inc. All rights reserved.DOI: 10.1016/j.bbmt.2016.06.012 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5008458  **PMID:**27343716 |
|  | Basu P(1), Banerjee D(1), Mittal S(1), Dutta S(1), Ghosh I(1), Chowdhury N(1),Abraham P(2), Chandna P(3), Ratnam S(4  Sensitivity of APTIMA HPV E6/E7 mRNA test in comparison with hybrid capture 2 HPVDNA test for detection of high risk oncogenic human papillomavirus in 396 biopsyconfirmed cervical cancers  J Med Virol. 2016 Jul;88(7):1271-8. doi: 10.1002/jmv.24453. Epub 2016 Jan 6.  **Author information:**  (1)Chittaranjan National Cancer Institute, Kolkata, India. (2)Department ofClinical Virology, Christian Medical College, Vellore, India. (3)Department ofMolecular Oncology, AceProbe Technologies (India) Pvt. Ltd, New Delhi, India.(4)Memorial University, St. John's, Newfoundland and Labrador, Canada.The sensitivity of E6/E7 mRNA-based Aptima HPV test (AHPV; Hologic, Inc.) fordetection of cervical cancer has been reported based on only a small number ofcases. We determined the sensitivity of AHPV in comparison with the DNA-basedHybrid Capture 2 HPV test (HC2; Qiagen) for the detection of oncogenic HPV in alarge number of cervical cancers at the time of diagnosis using cervical samplesobtained in ThinPrep (Hologic). Samples yielding discordant results weregenotyped using Linear Array assay (LA; Roche). Of 396 cases tested, AHPVdetected 377 (sensitivity, 95.2%; 95%CI: 93.1-97.3), and HC2 376 (sensitivity,94.9%; 95%CI: 92.7-97.1) with an agreement of 97.2% (kappa 0.7; 95%CI:0.54-0.87). Among six AHPV+/HC2- cases, LA identified oncogenic HPV types in fourincluding a type 73 and was negative in two. Among five AHPV-/HC2+ cases, LAdetected oncogenic HPV types in two including a type 73 and was negative inthree. Of 14 AHPV-/HC2- cases, 13 were genotyped. LA detected oncogenic HPV typesin six, non-oncogenic types in three, and was negative in four. This is thelargest study to demonstrate the sensitivity of AHPV for the detection ofinvasive cervical cancer and this assay showed equal sensitivity to HC2.© 2015 Wiley Periodicals, Inc.OI: 10.1002/jmv.24453 | **INTL** | **JUL TO DEC** | **PMID:**26693677 |
|  | Batra K(1), Gaikwad HS(2), Gutgutia I(3), Prateek S(4), Bajaj B(5).  Determinants of rupture of the unscarred uterus and the related feto-maternaloutcome: current scenario in a low-income country.  Trop Doct. 2016 Apr;46(2):69-73. doi: 10.1177/0049475515598464. Epub 2015 Aug 13.  **Author information:**  (1)Senior Resident, Vardhman Mahavir Medical College & Safdarjang Hospital, NewDelhi, India. (2)Professor, Vardhman Mahavir Medical College & SafdarjangHospital, New Delhi, India dongre.harsha1@gmail.com. (3)Research fellow, CMCVellore, Vellore, India. (4)Ex- Head of department, Vardhman Mahavir MedicalCollege & Safdarjang Hospital, New Delhi, India. (5)Senior Specialist, VardhmanMahavir Medical College & Safdarjang Hospital, New Delhi, India.BACKGROUND: Rupture of the gravid uterus is one of the most grievous obstetricevents accounting for considerable maternal morbidity and mortalityMATERIALS AND METHODS: An audit over a period of 2 years from October 2010 toSeptember 2012 was performed on pregnant women irrespective of gestational agewho had a uterine rupture of a uterus, presumed to be unscarred.RESULTS: There were 141 ruptures among 43,886 deliveries (0.3%). Of those, 18(12.8% of the ruptures and 0.04% of the deliveries) occurred in presumedunscarred uteri. The aetiologies were: obstruction 50%, uterine anomaly 22.2%,oxytocic administration 16.6 %, instrumental deliveries 5.5% and miscellaneous11.1 %. Hysterectomy was performed in 55.6% of cases. Fetal mortality was 83.3%and maternal mortality was 16.6%.CONCLUSIONS: Training of traditional birth attendants for early referrals,screening for uterine anomalies by ultrasound in early pregnancy and counsellingthe women, especially multiparas and grand-multiparas are mandatory. Oxytocinshould only be used for those if the doctor who prescribed its use stays with thepatient continuously and stops oxytocics as soon as there are reasonablecontractions. In emergency, the decision to delivery time should be less than30 min. These are some ways through which a tragic event like uterine rupture andits consequences can be averted. The Author(s) 2015.OI: 10.1177/0049475515598464 | **INTL** | **JAN TO JUN** |  |
|  | Baxi R(1), Vasan SK(1,)(2), Hansdak S(3), Samuel P(4), Jeyaseelan V(4),  Geethanjali FS(5), Murray RR(1), Venkatesan P(1), Thomas N(1).  Parental determinants of metabolic syndrome among adolescent Asian Indians: Across-sectional analysis of parent-offspring trios.  J Diabetes. 2016 Jul;8(4):494-501. doi: 10.1111/1753-0407.12319. Epub 2015 Jul  **Author information:** (1)Department of Endocrinology, Diabetes and Metabolism, Christian MedicalCollege, Vellore, India. (2)Department of Clinical Biochemistry, ChristianMedical College, Vellore, India. (3)Department of Medical Epidemiology andBiostatistics, Karolinska Institutet, Stockholm, Sweden. (4)Department of GeneraMedicine, Christian Medical College, Vellore, India. (5)Department ofBiostatistics, Christian Medical College, Vellore, India.BACKGROUND: The aim of the present study was to investigate the relationshipbetween parental metabolic syndrome (MS) and the risk of MS and associatedabnormalities in adolescent offspring.METHODS: This cross-sectional study was performed on 304 adolescents (12-16years; 236 children with at least one parent and 124 father-mother-child trios)recruited from four schools representing different socioeconomic strata fromVellore, India. Anthropometric data was collected and blood pressure, bloodglucose, and lipids were measured.RESULTS: The prevalence of MS in adolescent offspring, fathers, and mothers was3.3%, 52.5%, and 48.7% respectively. The most commonly observed metabolicabnormality among adolescents was lower high-density lipoprotein. Maternal waistcircumference (WC) was strongly correlated with adolescent body mass index(P = 0.007), WC (P < 0.001), serum triglycerides (P = 0.02), and systolic(P = 0.005) and diastolic (P = 0.01) blood pressure. Maternal MS status wassignificantly associated with a greater risk of central obesity (WC odds ratio[OR] 2.02; 95% confidence interval [CI] 1.21-3.17) in offspring. Both parentshaving MS conferred a significant effect on the child's WC (OR 1.21; 95% CI1.72-2.07) and increased risk of MS (OR 6.19; 95% CI 1.64-23.26).CONCLUSIONS: This study highlights the possible heritable parental componentsthat may contribute to the MS phenotype in offspring: MS in adolescent offspringisrelated to parental MS status, and maternal traits reflect offspring adiposityand metabolic traits more strongly than paternal factors. Therefore, adolescentchildren of parents with MS should be targets for primordial prevention ofcardiometabolic disease.© 2015 Ruijin Hospital, Shanghai Jiaotong University School of Medicine and JohnWiley & Sons Australia, Ltd.DOI: 10.1111/1753-0407.12319 | **INTL** | **JUL TO DEC** | **PMID:**26040846 |
|  | Bhavani GS(1), Shah H(2), Shukla A(1), Gupta N(3), Gowrishankar K(4), Rao AP(5),Kabra M(3), Agarwal M(6), Ranganath P(7,)(8), Ekbote AV(9), Phadke SR(6), KamathA(10), Dalal A(8), Girisha KM(1).  Clinical and mutation profile of multicentric osteolysis nodulosis andarthropathy.  Am J Med Genet A. 2016 Feb;170A(2):410-7. doi: 10.1002/ajmg.a.37447. Epub 2015Nov 24.  **Author information:**  (1)Department of Medical Genetics, Kasturba Medical College, Manipal University,Manipal, India. (2)Department of Orthopedics, Pediatric Orthopedics services,Kasturba Medical College, Manipal University, Manipal, India. (3)Division ofGenetics, Department of Pediatrics, All India Institute of Medical Sciences, NewDelhi, India. (4)Department of Medical Genetics, Kanchi Kamakoti Childs TrustHospital, Chennai, Tamilnadu, India. (5)Manipal Hospital, Bangalore, India(6)Department of Medical Genetics, Sanjay Gandhi Postgraduate Institute ofMedical Sciences, Lucknow, India. (7)Department of Medical Genetics, Nizam'sInstitute of Medical Sciences, Hyderabad, India. (8)Division of Diagnostics,Centre for DNA Fingerprinting and Diagnostics, Hyderabad, India. (9)Department ofClinical Genetics, Christian Medical College and Hospital, Vellore, India.(10)Department of Community Medicine, Kasturba Medical College, ManipalUniversity, Manipal, Karnataka, India.​Multicentric osteolysis nodulosis and arthropathy (MONA) is an infrequentlydescribed autosomal recessive skeletal dysplasia characterized by progressiveosteolysis and arthropathy. Inactivating mutations in MMP2, encoding matrixmetalloproteinase-2, are known to cause this disorder. Fifteen families withmutations in MMP2 have been reported in literature. In this study we screenedthirteen individuals from eleven families for MMP2 mutations and identified eightmutations (five novel and three known variants). We characterize the clinical,radiographic and molecular findings in all individuals with molecularly provenMONA from the present cohort and previous reports, and provide© 2015 Wiley Periodicals, Inc.I: 10.1002/ajmg.a.37447 | **INTL** | **JAN TO JUN** | **PMID:**26601801 |
|  | Bhowmick K(1), Matthai T(2), Nesaraj J(2), Jepegnanam TS(2).  Claw Toe Deformity of the Foot due to Foreign Body Granuloma.  Foot Ankle Spec. 2016 Jun;9(3):271-4. doi: 10.1177/1938640015585965. Epub 2015May 8.  **Author information:** (1)Department of Orthopaedics, Christian Medical College, Vellore, Tamil Nadu,India kaushikbhowmick97@yahoo.co.in. (2)Department of Orthopaedics, ChristianMedical College, Vellore, Tamil Nadu, India.We present a case of dynamic claw deformity of the right third toe due to aforeign body granuloma adhering to the flexor digitorum longus (FDL) tendon atth level of the body of the metacarpal bone. The deformity was completelycorrected after removal of the granuloma and lengthening of the FDL tendon. A25-year-old woman presented with pain and claw deformity of the right third toe,which corrected with ankle plantar flexion. Ultrasound and magnetic resonanceimaging suggested the presence of foreign body granuloma of the right FDL tendonat the level of body of third metacarpal bone. On removal of the granuloma and Zplasty of the FDL tendon, there was complete correction of the claw. In thereported literature, claw deformity is seen with compartment syndrome or anklefractures due to fixed length phenomenon or checkrein deformity of the flexortendons usually at the level of medial part of the ankle. Here, we present a caseof checkrein claw deformity of the FDL tendon due to a foreign bodygranuloma.LEVELS OF EVIDENCE: Therapeutic, Level IV: Case study.© 2015 The Author(s).OI: 10.1177/1938640015585965 | **INTL** | **JUL TO DEC** | **PMID:**25956874 |
|  | Bhowmick K(1), Varghese VD(2).  Retrograde Intramedullary Nailing for Recurrent Fracture in CongenitalPseudarthrosis of the Tibia.  J Foot Ankle Surg. 2016 Nov - Dec;55(6):1287-1291. doi:  **Author information:** (1)Assistant Professor, Department of Orthopaedics, Christian Medical College,Vellore, India. Electronic address: kaushikbhowmick97@yahoo.co.in. (2)AssistantProfessor, Department of Orthopaedics, Christian Medical College, Vellore, India.We present the case of a 23-year-old male with congenital pseudarthrosis of thetibia, who had undergone treatment with Ilizarov ring fixation and hadexperienced 4 episodes of repeat fracture. He had associated type 1neurofibromatosis, and his radiographs confirmed a type 6 Boyd's congenitalpseudarthrosis of the left tibia, with concomitant arthritic ankle and subtalarjoints. He was treated successfully with retrograde intramedullary nailing of thetibia and autologous bone grafting. At his final follow-up visit at 3 yearspostoperatively, he displayed complete union with no repeat fractures.Copyright © 2015 American College of Foot and Ankle Surgeons. Published byElsevier Inc. All rights reserved.DOI: 10.1053/j.jfas.2015.07.009 | **INTL** | **JUL TO DEC** | **PMID:**26342666 |
|  | Boaz RJ(1), George AP(1), Kumar RM(2), Devasia A(1)  Giant seminal vesicle cyst: an unusual site for a malignant extragastrointestinalstromal tumour  BMJ Case Rep. 2016 Mar 2;2016. pii: bcr2015214066. doi: 10.1136/bcr-2015-214066.  **Author information:**  (1)Department of Urology, Christian Medical College and Hospital, Vellore, TamilNadu, India. (2)Department of Pathology, Christian Medical College and Hospital,Vellore, Tamil Nadu, India.Mesenchymal tumours with clinicopathological and molecular profiles similar togastrointestinal stromal tumours (GISTs) are, on occasion, found inextragastrointestinal locations. Extra GIST (EGIST) is a singular occurrence inthe genitourinary tract. A 30-year-old man, catheterised following urinaryretention, was found to have a complex pelvic retrovesical cyst on imaging. Atoperation, origin from the right seminal vesicle was evident with histopathologyconfirming a GIST. The patient received adjuvant therapy with tyrosine kinaseinhibitor and is currently disease free at 2 years. This is only the secondreport of an EGIST at this anatomic locale. The current literature presentssignificant uncertainty in defining the true origin of EGISTs, particularly thosein the pelvis. We propose the designation origin indeterminate stromal tumour(OIST), to facilitate disambiguation and advance accurate profiling of EGIST; asubject in evolution.2016 BMJ Publishing Group Ltd.DOI: 10.1136/bcr-2015-214066 | **INTL** | **JAN TO JUN** | **PMID:**26935954 |
|  | Bose A(1), Isaac R, Balaji V, Rose W, Mohan V, Anandan S, Prasad JH, Abraham A,Krishna M, Viswanathan K.  Challenges in Implementation of ANISA Protocol at the Vellore Site, India.  Pediatr Infect Dis J. 2016 May;35(5 Suppl 1):S70-3. doi:  **Author information:**  (1)From the Christian Medical College, Vellore, India.  BACKGROUND:The Aetiology of Neonatal Infection in SouthAsia(ANISA) study aimsto determine the population-based incidence, etiology, risk factors andantibiotic resistance profiles of community-acquired young infant infections inBangladesh, India and Pakistan using community-based surveillance and standardnewer diagnostic tests. The data generated will help plan preventive andtreatment strategies to reduce neonatal and infant mortality in this region. Theaim of this article is to describe the site-specific characteristics, challengesand solutions in implementing the ANISA protocol at the Vellore site, India.CHALLENGES: Vellore joined the ANISA study 2 years after the sites in Bangladeshand Pakistan, and some challenges relate to the need for rapid implementation.The Vellore site differs primarily in the high rate of institutional deliveries,actively promoted by the Government of India's conditional cash transfer program.The Vellore site hospitals are regular care providers for the study population,which leads to very high rates of consent for enrollment and collection ofsamples. Keeping blood culture contamination rates low was a challenge the siteteam overcame by adhering strictly to the protocol. Issues related toincorporation of a large study into a busy clinical services laboratory wereovercome by meticulously setting up algorithms related to receipt, processing andstorage of samples  CONCLUSION: ANISA is a complex study, but the challenges in implementation havebeen largely resolved and documented.DOI: 10.1097/INF.0000000000001111 | **INTL** | **JAN TO JUN** | **PMID:**27070070 |
|  | Bose A(1), Munshi R(2), Tripathy RM(3), Madhusudana SN(4), Harish BR(5), ThakerS(6), Mahendra BJ(5), Gunale B(7), Gogtay NJ(6), Thatte UM(6), Mani RS(4),Manjunath K(1), George K(1), Yajaman AB(4), Sahai A(7), Dhere RM(7), Alex RG(1),Adhikari DD(1), Abhilash(1), Raghava V(1), Kumbhar D(2), Behera TR(3), KulkarniPS(8).  A randomized non-inferiority clinical study to assess post-exposure prophylaxisby a new purified vero cell rabies vaccine (Rabivax-S) administered byintramuscular and intradermal routes.  Vaccine. 2016 Sep 14;34(40):4820-6. doi: 10.1016/j.vaccine.2016.08.005. Epub 2016Aug 21.  **Author information:** (1)Christian Medical College, Vellore, India. (2)T.N. Medical College & BYL NairCh. Hospital, Mumbai, India. (3)M.K.C.G. Medical College and Hospital, Berhampur,India. (4)National Institute of Mental Health and NeuroSciences (NIMHANS),Bangalore, India. (5)Mandya Institute of Medical Sciences, Mandya, India. (6)SethGordhandas Sunderdas Medical College and King Edward Memorial Hospital, MumbaiIndia. (7)Serum Institute of India Pvt. Ltd., Pune, India. (8)Serum Institute ofIndia Pvt. Ltd., Pune, India. Electronic address: drpsk@seruminstitute.com.BACKGROUND: Rabies is a 100% fatal disease but preventable with vaccines andimmunoglobulins. We have developed a new purified vero cell rabies vaccine(Rabivax-S) and evaluated its safety and immunogenicity in post-exposureprophylaxis by intramuscular (IM) and intradermal (ID) routes.METHODS: This was a randomized active-controlled non-inferiority study in 180individuals (age 5years and above) with suspected rabies exposure (90 each withWHO Category II and Category III exposures). The participants received eitherRabivax-S (1mL IM; five doses), Rabivax-S (0.1mL ID; eight doses) or purifiedchick embryo cell vaccine (PCEC, Rabipur®) (1mL IM; five doses). The IM doseswere given on Day 0, 3, 7, 14 and 28 while the ID doses were given on days 0, 3,7 and 28. Category III patients also received a human rabies immunoglobulin(HRIG) on Day 0. Adverse events (AEs) were recorded with diary cards till day 42.Rabies neutralizing antibody levels were measured on day 0, 7, 14, 28 and 42.RESULTS: In both the category II and III patients, the geometric mean  concentration (GMC) ratios of Rabivax-S IM and Rabivax-S ID groups to PCEC IMwere more than 1, thus proving the non-inferiority. GMCs were similar or higherin Rabivax-S groups at all the time points. Seroresponse against rabies (RFFITtitre⩾0.5IU/mL) was achieved in all participants. Mostly mild local and systemicadverse events were reported across the three groups and all resolved withoutsequelae.CONCLUSIONS: Rabivax-S was well tolerated and showed immunogenicity comparable toa licensed rabies vaccine by both IM and ID routes in post-exposure prophylaxis.Registry No.: CTRI/2012/11/003135.Copyright © 2016 Elsevier Ltd. All rights reserved.DOI: 10.1016/j.vaccine.2016.08.005 | **INTL** | **JUL TO DEC** | **PMID:**27554534 |
|  | Brinda EM(1), Rajkumar AP(2), Attermann J(3), Gerdtham UG(4), Enemark U(1), JacobKS(5).  Health, Social, and Economic Variables Associated with Depression Among OlderPeople in Low and Middle Income Countries: World Health Organization Study onGlobal AGEing and Adult Health.  Am J Geriatr Psychiatry. 2016 Dec;24(12):1196-1208. doi:10.1016/j.jagp.2016.07.016. Epub 2016 Jul 25.  **Author information:** (1)Section for Health Promotion and Health Services Research, Department ofPublic Health, Aarhus University, Aarhus, Denmark. (2)Department of Old AgePsychiatry, Institute of Psychiatry, Psychology, & Neuroscience, King's CollegeLondon, London, UK; Mental Health of Older Adults and Dementia Clinical AcademicGroup, South London and Maudsley NHS Foundation Trust, London, UK. Electronicaddress: Anto.Rajamani@kcl.ac.uk. (3)Section of Epidemiology, Department ofPublic Health, Aarhus University, Aarhus, Denmark. (4)Health Economics Unit,Department of Clinical Sciences, Lund University, Lund, Sweden; Institute ofEconomic Research, Health Economics & Management, Lund University, Lund, Sweden.(5)Department of Psychiatry, Christian Medical College, Vellore, India.OBJECTIVE: Although depression among older people is an important public healthproblem worldwide, systematic studies evaluating its prevalence and determinantsin low and middle income countries (LMICs) are sparse. The biopsychosocial modelof depression and prevailing socioeconomic hardships for older people in LMICshave provided the impetus to determine the prevalence of geriatric depression; tostudy its associations with health, social, and economic variables; and toinvestigate socioeconomic inequalities in depression prevalence in LMICs.METHODS: The authors accessed the World Health Organization Study on GlobalAGEing and Adult Health Wave 1 data that studied nationally representativesample from six large LMICs (N = 14,877). A computerized algorithm deriveddepression diagnoses. The authors assessed hypothesized associations using surveymultivariate logistic regression models for each LMIC and pooled their riskestimates by meta-analyses and investigated related socioeconomic inequalitiesusing concentration indices.RESULTS: Cross-national prevalence of geriatric depression was 4.7% (95% CI:1.9%-11.9%). Female gender, illiteracy, poverty, indebtedness, pastinformal-sector occupation, bereavement, angina, and stroke had significantpositive associations, whereas pension support and health insurance showedsignificant negative associations with geriatric depression. Pro-poor inequalityof geriatric depression were documented in five LMICs.CONCLUSIONS: Socioeconomic factors and related inequalities may predispose,precipitate, or perpetuate depression amongolder people in LMICs. Relativeabsence of health safety net places socioeconomically disadvantaged older peoplein LMICs at risk. The need for population-based public health interventions andpolicies to prevent and to manage geriatric depression effectively in LMICscannot be overemphasized.Copyright Â© 2016 American Association for Geriatric Psychiatry. Published byElsevier Inc. All rights reserved.DOI: 10.1016/j.jagp.2016.07.016 | **INTL** | **JUL TO DEC** | **PMID:**27743841 |
|  | Brito-Zerón P, Acar-Denizli N, Zeher M, Rasmussen A, Seror R, Theander E, Li X,Baldini C, Gottenberg JE, Danda D, Quartuccio L, Priori R, Hernandez-Molina G,Kruize AA, Valim V, Kvarnstrom M, Sene D, Gerli R, Praprotnik S, Isenberg D,Solans R, Rischmueller M, Kwok SK, Nordmark G, Suzuki Y, Giacomelli R,Devauchelle-Pensec V, Bombardieri M, Hofauer B, Bootsma H, Brun JG, Fraile G,Carsons SE, Gheita TA, Morel J, Vollenveider C, Atzeni F, Retamozo S, Horvath IF,Sivils K, Mandl T, Sandhya P, De Vita S, Sanchez-Guerrero J, van der Heijden E,Trevisani VF, Wahren-Herlenius M, Mariette X, Ramos-Casals M; EULAR-SS  Influence of geolocation and ethnicity on the phenotypic expression of primarySjögren's syndrome at diagnosis in 8310 patients: a cross-sectional study fromthe Big Data Sjögren Project Consortium.  Ann Rheum Dis. 2016 Nov 29. pii: annrheumdis-2016-209952. doi:  OBJECTIVES: To analyse the influence of geolocation and ethnicity on the clinicalpresentation of primary Sjögren's syndrome (SjS) at diagnosisMETHODS: The Big Data Sjögren Project Consortium is an international, multicentreregistry designed in 2014. By January 2016, 20 centres from five continents wereparticipating. Multivariable logistic regression analyses were performed.RESULTS: We included 7748 women (93%) and 562 men (7%), with a mean age atdiagnosis of primary SjS of 53 years. Ethnicity data were available for 7884patients (95%): 6174 patients (78%) were white, 1066 patients (14%) were Asian,393 patients (5%) were Hispanic, 104 patients (1%) were black/African-Americanand 147 patients (2%) were of other ethnicities. SjS was diagnosed a mean of7 years earlier in black/African-American compared with white patients; thefemale-to-male ratio was highest in Asian patients (27:1) and lowest inblack/African-American patients (7:1); the prevalence of sicca symptoms waslowest in Asian patients; a higher frequency of positive salivary biopsy wasfound in Hispanic and white patients. A north-south gradient was found withrespect to a lower frequency of ocular involvement in northern countries for dryeyes and abnormal ocular tests in Europe (OR 0.46 and 0.44, respectively) andAsia (OR 0.18 and 0.49, respectively) compared with southern countries. Higherfrequencies of antinuclear antibodies (ANAs) were reported in northern countriesin America (OR=1.48) and Asia (OR=3.80) while, in Europe, northern countries hadlowest frequencies of ANAs (OR=0.67) and Ro/La (OR=0.69)CONCLUSIONS: This study provides the first evidence of a strong influence ofgeolocation and ethnicity on the phenotype of primary SjS at diagnosis.ublished by the BMJ Publishing Group Limited. For permission to use (where notalready granted under a licence) please go tohttp://www.bmj.com/company/products-services/rights-and-licensing/.DOI: 10.1136/annrheumdis-2016-209952 | **INTL** | **JUL TO DEC** | **PMID:**27899373 |
|  | Buchmann EJ(1), Stones W(2), Thomas N(3).  Preventing deaths from complications of labour and delivery.  Best Pract Res Clin Obstet Gynaecol. 2016 Oct;36:103-115. doi:  **Author information:** (1)Department of Obstetrics and Gynaecology, Chris Hani Baragwanath AcademicHospital, PO Bertsham 2013, Johannesburg, South Africa. Electronic address:eckhart.buchmann@wits.ac.za. (2)School of Medicine, University of St Andrews andCollege of Medicine, University of Malawi, Fife KY16 9JT, UK. Electronic address:rws6@st-andrews.ac.uk. (3)Department of Neonatology, Christian Medical College,Vellore 632004, India. Electronic address: niranjan@cmcvellore.ac.in.The process of labour and delivery remains an unnecessary and preventable causeof death of women and babies around the world. Although the rates of maternal andperinatal death are declining, there are large disparities between rich and poorcountries, and sub-Saharan Africa has not seen the scale of decline as seenelsewhere. In many areas, maternity services remain sparse and under-equippedwith insufficient and poorly trained staff. Priorities for reducing the mortalityburden are provision of safe caesarean section, prevention of sepsis andappropriate care of women in labour in line with the current best practices,appropriately and affordably delivered. A concern is that large-scale recourse tocaesarean delivery has its own dangers and may present new dominant causes formaternal mortality. An area of current neglect is newborn care. However,innovative training methods and appropriate technologies offer opportunities foraffordable and effective newborn resuscitation and follow-up management inlow-income settings.Copyright © 2016. Published by Elsevier Ltd.DOI: 10.1016/j.bpobgyn.2016.05.012 | **INTL** | **JUL TO DEC** | **PMID:**27427491 |
|  | Burad DK(1), Kodiatte TA(1), Rajeeb SM(1), Goel A(1), Eapen CE(1), RamakrishnaB(1).  Neuroendocrine neoplasms of liver - A 5-year retrospective clinico-pathologicalstudy applying  World Health Organization 2010 classification. World J Gastroenterol. 2016 Oct 28;22(40):8956-8966.  **Author information:** (1)Deepak Kalyansingh Burad, Thomas Alex Kodiatte, Banumathi Ramakrishna,Department of Pathology, Christian Medical College, Vellore 632004, Tamil Nadu,IndiaAIM: To study the clinicopathological characteristics of neuroendocrine neoplasms(NEN) on liver samples and apply World Health Organization (WHO) 2010 grading ofgastroenteropancreatic (GEP) NEN.METHODS: Clinicopathological features of 79 cases of NEN of the liver diagnosedbetween January 2011 to December 2015 were analyzed. WHO 2010 classification ofGEP NEN was applied and the tumors were graded as G1, G2 or G3. Two morecategories, D1/2 (discordant 1/2) and D2/3 (discordant 2/3) were also applied.The D1/2 grade tumors had a mitotic count of G1 and Ki-67 index of G2. The D2/3tumors had a mitotic count of G2 and Ki-67 index of G3. The follow up detailswhich were available till the end of the study period (December 2015) werecollected.RESULTS: Of the 79 tumors, 16 each were G1 and G2, and 18 were G3 tumors. Of theremaining 29 tumors, 13 were assigned to D1/2 and 16 were D2/3 grade. Malepreponderance was noted in all tumors except for G2 neoplasms, which showed aslight female predilection. The median age at presentation was 47 years (range10-82 years). The most common presentation was abdominal pain (81%). Pancreas(49%) was the most common site of primary followed by gastrointestinal tract(24.4%) and lungs (18%). Radiologically, 87% of the patients had multiple liverlesions. Histopathologically, necrosis was seen in only D2/3 and G3 tumorsMicrovascular invasion was seen in all grades. Metastasis occurred in all gradesof primary NEN and the grades of the metastatic tumors and their correspondingprimary tumors were similar in 67% of the cases. Of the 79 patients, 36 had atleast one follow up visit with a median duration of follow up of 8.5 mo (range:1-50 mo). This study did not show any impact of the grade of tumor on the shortterm clinical outcome of these patients.CONCLUSION: Liver biopsy is an important tool for clinicopathologicalcharacterization and grading of NEN, especially when the primary is notidentified. Eighty-seven percent of the patients had multifocal liver lesionsirrespective of the WHO grade, indicating a higher stage of disease atpresentation. Follow up duration was inadequate to derive any meaningfulconclusion on long term outcome in our study patients.DOI: 10.3748/wjg.v22.i40.8956 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5083801  **PMID:**27833387 |
|  | Burad DK(1), Ramakrishna B(1).  Cytological diagnosis of biliary cryptococcosis in an immunocompromised patientwith mid common bile duct stricture masquerading as cholangiocarcinoma.  Cytopathology. 2016 Sep 4. doi: 10.1111/cyt.12369. [Epub ahead of print]  **Author information:** (1)Department of General Pathology, Christian Medical College, Vellore, TamilNadu, India.DOI: 10.1111/cyt.12369 | **INTL** | **JUL TO DEC** | **PMID:**27592857 |
|  | Carcao M(1), Srivastava A(2).  Factor VIII/factor IX prophylaxis for severe hemophilia.  Semin Hematol. 2016 Jan;53(1):3-9. doi: 10.1053/j.seminhematol.2015.10.006. Epub2015 Oct 26.  **Author information:**  (1)Department of Paediatrics; Division of Haematology/Oncology and Child HealthEvaluative Sciences, Research Institute, Hospital for Sick Children, Toronto,Ontario, Canada. Electronic address: manuel.carcao@sickkids.ca. (2)Department ofHaematology and Centre for Stem Cell Research (a unit of inStem, Bengaluru),Christian Medical College, Vellore, India. Electronic address:aloks@cmcvellore.ac.in  Experience with clotting factor concentrate (CFC) replacement products overseveral decades has shown that regular replacement (prophylaxis) is the only wayto prevent musculoskeletal damage in hemophilia and impact the natural history ofhemophilia. Yet there is a lack of data on the optimal age to start suchreplacement therapy and the regimens to be used. While very early administrationof high doses is certainly more effective in preventing bleeding, cost andcompliance are major constraints all over the world. Starting prophylaxis witheven lower doses comparable to that used in episodic therapies leads to majorreduction in bleeding. Recognition of the clinical heterogeneity of hemophiliaeven among patients with a label of severe hemophilia in terms of theirspontaneous bleeding has led to efforts aimed at individualizing CFC replacement,based on clinical responses or pharmacokinetic data of the CFC. The importance oflong-term outcome assessment being combined with CFC replacement therapy cannotbe overemphasized.Copyright © 2016 Elsevier Inc. All rights reserved.DOI: 10.1053/j.seminhematol.2015.10.006 | **INTL** | **JAN TO JUN** | **PMID:**26805901 |
|  | Chadha AS(1), Khoo A(1), Aliru ML(1), Arora HK(2), Gunther JR(1), Krishnan S(3).  Recent Advances and Prospects for Multimodality Therapy in Pancreatic Cancer.  Semin Radiat Oncol. 2016 Oct;26(4):320-37. doi: 10.1016/j.semradonc.2016.05.002.Epub 2016 May 26.  **Author information:** (1)Department of Radiation Oncology, The University of Texas MD Anderson Cancer,Houston, TX. (2)Department of Internal Medicine, Christian Medical CollegeVellore, India. (3)Department of Radiation Oncology, The University of Texas MDAnderson Cancer, Houston, TX. Electronic address: skrishnan@mdanderson.org.The outcomes for treatment of pancreatic cancer have not improved dramatically inmany decades. However, the recent promising results with combination chemotherapyregimens for metastatic disease increase optimism for future treatments. Withgreater control of overt or occult metastatic disease, there will likely be anexpanding role for local treatment modalities, especially given that nearly athird of pancreatic cancer patients have locally destructive disease withoutdistant metastatic disease at the time of death. Technical advances have allowedfor the safe delivery of dose-escalated radiation therapy, which can then becombined with chemotherapy, targeted agents, immunotherapy, and nanoparticulatedrug delivery techniques to produce novel and improved synergistic effects. Herewe discuss recent advances and future directions for multimodality therapy inpancreaticcancer.Copyright©2016 Elsevier Inc. All rights reserved.DOI: 10.1016/j.semradonc.2016.05.002 | **INTL** | **JUL TO DEC** | **PMID:**27619253 |
|  | Chaudhary AK(1), Mohapatra R(2), Nagarajaram HA(2), Ranganath P(3,)(4), DalalA(3), Dutta A(5), Danda S(5), Girisha KM(6), Bashyam MD(1).  The novel EDAR p.L397H missense mutation causes autosomal dominant hypohidroticectodermal dysplasia.  [J Eur Acad Dermatol Venereol.](https://www.ncbi.nlm.nih.gov/pubmed/27168349) 2017 Jan;31(1):e17-e20. doi: 10.1111/jdv.13587. Epub 2016 May 11.  **Author information:**  (1)Laboratory of Molecular Oncology, Hyderabad, India. (2)Laboratory ofComputational biology, Hyderabad, India. (3)Diagnostics Division, Centre for DNAFingerprinting and Diagnostics, Hyderabad, India. (4)Nizam's Institute of MedicalSciences, Hyderabad, India. (5)Christian Medical College, Vellore, India.(6)Department of Medical Genetics, Kasturba Medical College, Manipal University,Manipal, India.OI: 10.1111/jdv.13587 | **INT** | **JAN TO JUN** | **PMID:**27168349 |
|  | Chaudhuri B(1), Mondal B(2), Ray SK(3), Sarkar SC(4).  A novel biocompatible conducting polyvinyl alcohol (PVA)-polyvinylpyrrolidone(PVP)-hydroxyapatite (HAP) composite scaffolds for probable biologicalapplication.  Colloids Surf B Biointerfaces. 2016 Jul 1;143:71-80. doi:10.1016/j.colsurfb.2016.03.027. Epub 2016 Mar 11.  **Author information:** (1)Centre for Rural & Cryogenic Technologies, Jadavpur University, Kolkata700032, India. Electronic address: chaudhuri.bis12345@gmail.com. (2)CentralScientific Service, Indian Association for the Cultivation of Science, Kolkata700032, India. (3)Centre for Bioseparation Technology (CBST), VIT-University,Vellore, Tamil Nadu 632014, India. (4)Centre for Rural & Cryogenic Technologies,Jadavpur University, Kolkata 700032, India.We have prepared biocompatible composites of 80wt% polyvinyl alcohol(PVA)-(20wt%) polyvinylpyrrolidone (PVP) blend with different concentrations ofbioactive nanohydroxyapatite, Ca10(PO4)6(HO)2 (HAP). The composite filmsdemonstrated maximum effective conductivity (σ∼1.64×10(-4)S/m) and effectivedielectric constant (ε∼290) at percolation threshold concentration (∼10wt% HAP)at room temperature. These values of σ and ε are much higher than those of PVA,PVP or HAP. Our preliminary observation indicated excellent biocompatibility ofthe contents (8.5 and 5wt% within percolation threshold concentration) using NIH 3T3fibroblast cell line. Cells viability on the well characterized composite fibrousscaffolds was determined by MTT[3-(4,5-di-methylthiazol-2-yl)-2,5-diphenyltetrazolium bromide] assay analysis.Enhancement of σ, due to HAP addition, was found to show increasedbiocompatibility of the fibrous scaffold. Enhanced σ value of the PVA/PVP-HAPcomposite provided supporting cues for the increased cell viability andbiocompatibility of the composite fibrous meshes. Excellent biocompatibilitythese electrospun composite scaffolds made them to plausible potential candidatesfor tissue engineering or other biomedical applications.Copyright © 2016 Elsevier B.V. All rights reserved. | **INTL** | **JUL TO DEC** | **PMID:**26998868 |
|  | Cherian AG(1), Jamkhandi D(2), George K(2), Bose A(2), Prasad J(2), Minz S(2).  Prevalence of Congenital Anomalies in a Secondary Care Hospital in South India: ACross-Sectional Study.  J Trop Pediatr. 2016 Oct;62(5):361-7. doi: 10.1093/tropej/fmw019. Epub 2016 Apr 4.  **Author information:** (1)Community Health Department, Christian Medical College, Vellore, India annegc97@yahoo.co.in. (2)Community Health Department, Christian Medical College,Vellore, India.OBJECTIVE: To study the prevalence and types of congenital anomalies that presentat birth in a secondary-level hospital in South India and its contribution toperinatal mortality.MATERIALS AND METHODS: A total of 36,074 births over 10 years, from 2003 to 2013,were studied for the prevalence of gross congenital malformations at birth. Itwas a descriptive, cross-sectional study using data from the birth register andavailable medical records.RESULTS: The incidence of birth defects was 12.5 per 1000 live births, withmusculoskeletal disorders being the commonest, followed by craniovertebralanomalies. The prevalence of anomalies over the past 10 years has not shown anysignificant change (p= 0.555).DISCUSSION: The high prevalence of neural tube defects indicates the need forpericonceptional folic acid supplementation and early detection of anomalies,which would help in timely management. Detection of musculoskeletal anomalieswould help in counseling patients antenatally.© The Author [2016]. Published by Oxford University Press. All rights reservedFor Permissions, please email: journals.permissions@oup.com.DOI: 10.1093/tropej/fmw019 | **INTL** | **JUL TO DEC** | **PMID:**27044502 |
|  | Cherian AJ(1), Gowri M(2), Ramakant P(3), Paul TV(4), Abraham DT(3), Paul MJ(3).  The Role of Magnesium in Post-thyroidectomy Hypocalcemia.  World J Surg. 2016 Apr;40(4):881-8. doi: 10.1007/s00268-015-3347-3.  **Author information:**  (1)Department of Endocrine Surgery, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. anish@cmcvellore.ac.in. (2)Department of Biostatistics, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. (3)Department of Endocrine Surgery, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. (4)Department of Endocrinology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India.  BACKGROUND: The purpose of this study was to determine the prevalence of hypomagnesemia in patients undergoing thyroidectomy and evaluate the relationship of hypomagnesemia with transient and severe hypocalcemia. MATERIALS AND METHODS: This was a prospective observational study of 50 patients undergoing thyroidectomy. Blood samples were collected pre- and postoperatively for calcium, albumin, magnesium, phosphorous and parathormone (PTH). Signs, symptoms of hypocalcemia and volume of intravenous fluids used perioperatively were documented. The statistical analysis was performed using STATA I/C 10.1. RESULTS: Preoperatively, twelve patients (24 %) had hypomagnesemia and one (2 %) hypocalcemia. On the first postoperative day, hypomagnesemia was seen in 70 % and hypocalcemia in 30 %. A similar trend was observed in the fall and rise of postoperative calcium and magnesium values (p = 0.41). Severe hypocalcemia was present in three patients (6 %). All three patients had a very low postoperative PTH (<2 pg/ml). Among them, two patients (66 %) had hypomagnesemia and their hypocalcemia responded to intravenous magnesium correction. Significant risk factors for postoperative hypocalcemia include a higher volume of fluid used perioperatively and low postoperative PTH (<8 pg/ml) (p = 0.01 and 0.03, respectively). CONCLUSION: Preoperative hypomagnesemia (24 %) was prevalent in this cohort of patients. Postoperative hypomagnesemia is a common event (70 %) following total thyroidectomy, and magnesium levels tend to mimic the calcium levels postoperatively. The cause of hypocalcemia post-thyroidectomy in this study is mainly a factor of parathyroid function and fluid status. Severe hypocalcemia is a rare event, and hypomagnesemia is associated in the majority of these patients. The role of magnesium correction to alleviate severe hypocalcemia needs to be further studied. DOI: 10.1007/s00268-015-3347-3 | **INTL** | **JAN TO JUN** | **PMID:**26578317 |
|  | Cherian AJ(1), Ponraj S(2), Gowri S M(3), Ramakant P(4), Paul TV(5), AbrahamDT(4), Paul MJ(4).  The role of vitamin D in post-thyroidectomy hypocalcemia: Still an enigma.  Surgery. 2016 Feb;159(2):532-8. doi: 10.1016/j.surg.2015.08.014. Epub 2015 Sep11.  **Author information:**  (1)Department of Endocrine Surgery, Christian Medical College, Vellore, TamilNadu, India. Electronic address: anish@cmcvellore.ac.in. (2)Department ofVascular Surgery, Christian Medical College, Vellore, Tamil Nadu, India.(3)Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu,India. (4)Department of Endocrine Surgery, Christian Medical College, Vellore,Tamil Nadu, India. (5)Department of Endocrinology, Christian Medical College,Vellore, Tamil Nadu, India.  BACKGROUND: There is conflicting evidence regarding the role of vitamin Ddeficiency in the development of post-thyroidectomy hypocalcemia. Recent reportsshow postoperative parathormone (PTH) is unreliable in predictingpost-thyroidectomy hypocalcemia in vitamin D deficient patients. We conductedthis study to analyze the role of vitamin D status in the development ofpost-thyroidectomy hypocalcemia and to evaluate its effect on the predictabilityof PTH as a marker for post-thyroidectomy hypocalcemia.METHOD: A retrospective review of prospectively collected data of patientsundergoing thyroidectomy between August 2007 to September 2013 (n = 150) wasperformed. Results of preoperative calcium, albumin, vitamin D, PTH andpostoperative calcium, albumin, and PTH were collated. Patients were divided into2 groups based on their vitamin D status: group A, vitamin D ≥ 20 ng/mL and groupB, vitamin D < 20 ng/mLRESULTS: Vitamin D deficiency was present in 80 (53.3%) patients andpost-thyroidectomy hypocalcemia developed in 67 (44.7%). The incidence ofpostoperative hypocalcemia was similar in both the groups (48.6% and 41.3%,respectively). Vitamin D status was not associated with the development ofpost-thyroidectomy hypocalcemia (P = .23). Postoperative PTH of <8 pg/mL wasstrongly associated with the development of hypocalcemia in both the groups(P = .0002 and .0045, respectively). The area under the receiver operatorcharacteristic curve in group B (0.68) was less than in group A (0.76; P = .41).CONCLUSION: The majority of patients were vitamin D deficient in this cohort, butthis did not increase the risk of post-thyroidectomy hypocalcemia, nor did itinterfere with the predictability of PTH as a marker of post-thyroidectomyhypocalcemia.Copyright © 2016 Elsevier Inc. All rights reserved.DOI: 10.1016/j.surg.2015.08.014 | **INTL** | **JAN TO JUN** | **PMID:**26365947 |
|  | Chowdhury SD(1), Kurien RT(1), Bharath AK(1), Dutta AK(1), David D(1), BharathCK(1), Joseph AJ(1).  Endoscopic ultrasound-guided gastrojejunostomy with a Nagi stent for relief ofjejunal loop obstruction following hepaticojejunostomy. Endoscopy. 2016;48 Suppl 1:E263-4. doi: 10.1055/s-0042-112971. Epub 2016 Aug 10.  **Author information:** (1)Department of Gastroenterology, Christian Medical College, Vellore, Tamil Nadu, India. DOI: 10.1055/s-0042-112971 | **INTL** | **JUL TO DEC** | **PMID:**27509466 |
|  | Christudoss P(1), Chacko G(2), Selvakumar R(1), Fleming JJ(1), Pugazhendhi S(3),  Mathew G(4).  Expression of metallothionein in dimethylhydrazine-induced colonic precancerous and cancerous model in rat.  J Cancer Res Ther. 2016 Oct-Dec;12(4):1307-1312. doi: 10.4103/0973-1482.179107.  **Author information:**  (1)Department of Clinical Biochemistry, Christian Medical College, Vellore, Tamil Nadu, India. (2)Department of Neuropathology, Christian Medical College, Vellore, Tamil Nadu, India. (3)Department of Gastrointestinal Sciences, Christian Medical College, Vellore, Tamil Nadu, India. (4)Department of General Surgery, Christian Medical College, Vellore, Tamil Nadu, India.  AIM: Metallothionein (MT) is a small protein with a high affinity for divalent heavy metals and has a function in zinc homeostasis. The purpose of this study was to assess the MT mRNA gene expression as well as the MT protein content by immunohistochemistry and radioimmunoassay (RIA) in 1,2-dimethylhydrazine (DMH)-induced precancerous and cancerous colonic tissue in rats. MATERIALS AND METHODS: Six-week-old rats were given subcutaneous injections of DMH twice a week for 3 months and sacrificed at 4 months (precancerous model) and 6 months (cancerous model). We determined MT mRNA expression by reverse transcription polymerase chain reaction and MT protein content by both immunohistochemical expression and cadmium-109 RIA. RESULTS: MT mRNA expression in the large intestine showed statistically significant decrease in the precancerous (P < 0.01) and the cancerous (P < 0.001) model as compared with controls. Immunohistochemical expression of MT showed statistically significant decrease (P < 0.05) in the colonic cancerous tissue. MT content in the large intestine showed statistically significant decrease in precancerous (P < 0.005) and cancerous (P < 0.001) model as compared with controls. CONCLUSION: This study suggests that a decrease in the colonic MT Mrna expression, MT protein expression, and content in DMH-induced colonic cancer model is associated with the development of preneoplastic lesions and further progression to carcinoma in the colon results in a greater reduction in the levels of each of these parameters. DOI: 10.4103/0973-1482.179107 | **INT** | **JUL TO DEC** | PMID: 28169244 |
|  | Connor NE(1), Islam MS, Arvay ML, Baqui AH, Zaidi AK, Soofi SB, Panigrahi P, BoseA, Islam M, El Arifeen S, Saha SK, Qazi SA; ANISA Methods Group.  **Collaborators**: Uddin A, Hossain B, Rahman QS, Hossain T, Winchell JM, Diaz MH,Shang N, Choi Y, Schrag SJ, Kumar A, Kumar V, Billah A, Mullany L, Santosham M,Begum N, Roth DE, Crook D, Luby SP, Kazi AM, Ahmed I, Qureshi SM, Ahmed S, BhuttaZA.  Methods Employed in Monitoring and Evaluating Field and Laboratory Systems in theANISA Study: Ensuring Quality.  Pediatr Infect Dis J. 2016 May;35(5 Suppl 1):S39-44. doi:10.1097/INF.0000000000001105.  **Author information:**  (1)From the JAN TO JUNCentre for Child and Adolescent Health, International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh; †Child Health Research Foundation, Dhaka, Bangladesh; ‡Centers for Disease Control and Prevention, Atlanta, Georgia; §Department of International Health, International Center for Maternal and Newborn Health, Johns Hopkins Bloomberg School of Public Health, Johns Hopkins University, Baltimore, Maryland; ¶The Aga Khan University, Karachi, Pakistan; ‖Center for Global Health and Development, College of Public Health, University of Nebraska Medical Center, Omaha, Nebraska; JAN TO JUNJAN TO JUNChristian Medical College, Vellore, India; and ††Department of Maternal, Newborn, Child and Adolescent Health, World Health Organization, Geneva, Switzerland.  BACKGROUND: The Aetiology of Neonatal Infection in South Asia (ANISA) study maintains operations in Bangladesh, India and Pakistan. We developed and deployed a multilayered monitoring system to measure performance indicators of field sites and laboratory operations. This system allows for real-time provision of feedback to study site teams and project stakeholders. The goal of this monitoring and evaluation system is to promote optimal performance and consistency in protocol application at all sites over the course of the study, thereby safeguarding the validity of project findings. This article describes each of the interdependent monitoring layers that were conceptualized, developed and employed by the ANISA coordination team. METHODS: Layers of monitoring include site-level, central and database-related activities along with periodic site visitation. We provide a number of real-world examples of how feedback from the ANISA monitoring system directly informs a number of crucial decisions and course corrections during the project. CONCLUSION: The ANISA monitoring system represents a transparent, understandable and practical resource for development of project monitoring systems in complex multisite health research projects. DOI: 10.1097/INF.0000000000001105 | **INTL** | **JAN TO JUN** | **PMID:**27070063 |
|  | Cunliffe NA(1), Kang G(2).  Can Changes to Scheduling Enhance the Performance of Rotavirus Vaccines inLow-Income Countries?  J Infect Dis. 2016 Jun 1;213(11):1673-5. doi: 10.1093/infdis/jiw026. Epub 2016Jan 27.  **Author information:** (1)Centre for Vaccine Development and Evaluation, Institute of Infection and Global Health, University of Liverpool, United Kingdom. (2)Wellcome Trust Research Laboratory, Division of Gastrointestinal Sciences, Christian Medical College, Vellore, India. DOI: 10.1093/infdis/jiw026 | **INTL** | **JUL TO DEC** | **PMID:**26823336 |
|  | Daniel HD(1), David J(1), Raghuraman S(1), Gnanamony M(1), Chandy GM(2), Sridharan G(1), Abraham P(1).  Comparison of Three Different Hepatitis C Virus Genotyping Methods: 5'NCRPCR-RFLP, Core Type-Specific PCR, and NS5b Sequencing in a Tertiary Care Hospitalin South India.  J Clin Lab Anal. 2016 Sep 1. doi: 10.1002/jcla.22045. [Epub ahead of print]  **Author information:**(1)Department of Clinical Virology, Christian Medical College, Vellore, India. (2)Department of Gastrointestinal Sciences, Christian Medical College, Vellore, India.  BACKGROUND: Based on genetic heterogeneity, hepatitis C virus (HCV) is classified  into seven major genotypes and 64 subtypes. In spite of the sequence heterogeneity, all genotypes share an identical complement of colinear genes within the large open reading frame. The genetic interrelationships between these genes are consistent among genotypes. Due to this property, complete sequencing of the HCV genome is not required. HCV genotypes along with subtypes are critical for planning antiviral therapy. Certain genotypes are also associated with higher progression to liver cirrhosis.  METHODS: In this study, 100 blood samples were collected from individuals who came for routine HCV genotype identification. These samples were used for the comparison of two different genotyping methods (5'NCR PCR-RFLP and HCV core type-specific PCR) with NS5b sequencing. RESULTS: Of the 100 samples genotyped using 5'NCR PCR-RFLP and HCV coretype-specific PCR, 90% (κ = 0.913, P < 0.00) and 96% (κ = 0.794, P < 0.00) correlated with NS5b sequencing, respectively. Sixty percent and 75% of discordant samples by 5'NCR PCR-RFLP and HCV core type-specific PCR, respectively, belonged to genotype 6. All the HCV genotype 1 subtypes were classified accurately by both the methods.  CONCLUSION: This study shows that the 5'NCR-based PCR-RFLP and the HCV core type-specific PCR-based assays correctly identified HCV genotypes except genotype 6 from this region. Direct sequencing of the HCV core region was able to identify all the genotype 6 from this region and serves as an alternative to NS5b sequencing.  © 2016 Wiley Periodicals, Inc. DOI: 10.1002/jcla.22045 | **INTL** | **JUL TO DEC** | **PMID:**27580956 |
|  | Das M(1), Chaitanya VS(2), Kanmani K(2), Rajan L(2), Ebenezer M(2).  Genomic diversity in Mycobacterium leprae isolates from leprosy cases in SouthIndia.  Infect Genet Evol. 2016 Nov;45:285-289. doi: 10.1016/j.meegid.2016.09.014. Epub2016 Sep 15.  **Author information:** (1)Molecular Biology Lab, Schieffelin Institute of Health-Research and Leprosy Center (SIH-R&LC), Karigiri, Vellore, Tamil Nadu 632106, India. Electronic  address: madhusmitadas21@gmail.com. (2)Molecular Biology Lab, Schieffelin Institute of Health-Research and Leprosy Center (SIH-R&LC), Karigiri, Vellore, Tamil Nadu 632106, India.  OBJECTIVE: The Objective of this study was to identify the strain diversity of Mycobacterium leprae in terms of SNP types and subtypes stratified as per genomic single nucleotide polymorphisms, in clinical isolates of leprosy patients from a tertiary care leprosy center in South India. Further, the associations of SNP types with clinical outcomes in leprosy were also investigated. METHODS: DNA was extracted from excisional skin biopsies of a total of 172 newly diagnosed untreated leprosy patients from a clinic in Tamil Nadu, in south India, that also serves patients from neighboring states. All the leprosy patients were those who voluntarily reported at the clinic during the study period of one year i.e., 2015. Clinical and histopathological details were collected at diagnosis and leprosy was confirmed through bacteriological smear examination and PCR for M. leprae specific RLEP region. SNP types and subtypes were determined by PCR amplification and Sanger sequencing of PCR products. RESULTS: M. leprae specific RLEP gene amplification was achieved in 160 out of 172 patients. Among 160 specimens 118(73.75%) were type 1 and 42 (26.25%) were type 2 and on subtyping it was noted that 88/160 (55.00%) were 1D, 25/160 (15.62%) 1C, 5/160 (3.12%) 1A, 33/160 (20.62%) 2G and 9/160 (5.62%) were 2H. CONCLUSION: Our results indicated that subtype 1D is predominant in the south Indian population. We also noted 2G, 1C and 1A in the patient sample tested. Additionally we identified subtype 2H for the first time in India. Copyright Â© 2016. Published by Elsevier B.V. DOI: 10.1016/j.meegid.2016.09.014 | **INTL** | **JUL TO DEC** | **PMID:**27642139 |
|  | Das S(1), Barnwal P(2), Ramasamy A(3), Sen S(4), Mondal S(5).  Lysergic acid diethylamide: a drug of 'use'?  Ther Adv Psychopharmacol. 2016 Jun;6(3):214-28. doi: 10.1177/2045125316640440.Epub 2016 Mar 23.  **Author information:**  (1)Department of Pharmacology, Christian Medical College, Vellore, 632002, India. (2)Jamia Hamdard (Hamdard University), New Delhi, India. (3)Swamy Vivekanandha  College of Pharmacy, Namakkal, India. (4)Christian Medical College, Vellore, India. (5)Calcutta School of Tropical Medicine, Kolkata, India.  Lysergic acid diethylamide (LSD), described as a classical hallucinogen, began its journey from the middle of the last century following an accidental discovery. Since then, it was used as a popular and notorious substance of abuse in various parts of the world. Its beneficial role as an adjunct to psychotherapy was much unknown, until some 'benevolent' experiments were carried out over time to explore some of its potential uses. But, many of its effects were unclear and seemed to be a psychedelic enigma. In this review article, we have described the receptor pharmacology, mechanism of action, effects and adverse effects of LSD on the normal body system. We have also highlighted its addictive potentials and the chances of developing tolerance. We have assimilated some of the interesting therapeutic uses of this drug, such as an antianxiety agent, a creativity enhancer, a suggestibility enhancer, and a performance enhancer. We have also described LSD to be successfully used in drug and alcohol dependence, and as a part of psychedelic peak therapy in terminally ill patients. The relevant chronological history and literature in the light of present knowledge and scenarios have been discussed. Based on available evidence, LSD could be tried therapeutically in certain specific conditions under controlled settings. But as we mention, due to all the safety concerns, the use of this nonaddictive 'entheogen' in actual practice warrants a lot of expertise, caution, cooperation and ethical considerations. DOI: 10.1177/2045125316640440 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4910402  **PMID:**27354909 |
|  | Das S(1), Barnwal P(2), Winston A B(3), Mondal S(4), Saha I(5).  Brexpiprazole: so far so good.  Ther Adv Psychopharmacol. 2016 Feb;6(1):39-54. doi: 10.1177/2045125315614739.  **Author information:**  (1)Department of Pharmacology, Christian Medical College, Vellore, 632002, India. (2)Jamia Hamdard (Hamdard University), New Delhi, India. (3)Christian Medical College, Vellore, India. (4)Calcutta School of Tropical Medicine, Kolkata, India. (5)Medical College Kolkata, Kolkata, India.  This article describes the role of a newly approved antipsychotic agent brexpiprazole in the treatment of schizophrenia and major depressive disorder. This drug has high affinity for 5-HT1A, 5-HT2A, D2 and α1B,2C receptors. It displays partial agonism at 5-HT1A and D2 receptors and potent antagonism at 5-HT2A and α1B,2C adrenergic receptors. It also has some affinity (antagonism) for D3, 5-HT2B, 5-HT7 and α1A,1D receptors, and moderate affinity for H1 and low affinity for M1 receptors. These all lead to a favorable antipsychotic profile in terms of improvement of cognitive performance and sleep patterns, as well as effects on affective states and potential to treat core symptoms in schizophrenia and major depressive disorder, including cognitive deficits with a low risk of adverse effects (extrapyramidal symptoms, metabolic complications, weight gain, akathisia potential) that are commonly encountered with other typical and second-generation antipsychotic drugs. In our review, we have made an attempt to decipher the pharmacological profile of brexpiprazole from two major trials (VECTOR and BEACON). We have also tried to give a concise but detailed overview of brexpiprazole by head to head comparison of the pharmacological profile of brexpiprazole and its earlier congeners aripiprazole and prototype antipsychotic drug chlorpromazine by accessing individual summaries of product characteristics from the US Food and Drug Administration database, 2015. Relevant preclinical and clinical studies associated with this drug have been discussed with emphasis on efficacy and safety concerns. From the studies done so far, it can be concluded that brexpiprazole can be an effective monotherapy for schizophrenia and as an adjunct to other antidepressant medications in major depressive disorder. DOI: 10.1177/2045125315614739 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4749739  **PMID:**26913177 |
|  | Das S(1), Winston A B(2), Sukumaran D(3), Kumar A(4), Fx MS(5), Prasad J(6).  Drug prescribing pattern in pregnancy in a secondary care hospital in southIndia: a retrospective study.  Trop Doct. 2016 Apr;46(2):86-90. doi: 10.1177/0049475515609841. Epub 2015 Oct 7.  **Author information:**  (1)PG Registrar, Department of Pharmacology, Christian Medical College, Vellore, India saibaldas123@gmail.com. (2)Assistant Professor, Department of Pharmacology, Christian Medical College, Vellore, India. (3)PG Registrar, Department of Pharmacology, Christian Medical College, Vellore, India. (4)Lecturer, Department of Pharmacology, Christian Medical College, Vellore, India. (5)Associate Professor, Department of Pharmacology, Christian Medical College, Vellore, India. (6)Professor, Department of Community Health and Development, Christian Medical College, Vellore, India.  BACKGROUND: In pregnancy drug treatment presents a special concern due potential teratogenic effects and physiologic alterations in mother. This retrospective study was performed to evaluate the drug prescribing pattern in pregnancy among pregnant women in a secondary care hospital in India. MATERIALS AND METHODS: This cross-sectional retrospective study was done for 3 months using pre-formatted forms and patient's records. RESULTS: A total of 326 drugs, including 46 different types of drugs, were prescribed to 606 gravid women. Eight different types of medications were started before being seen at the antenatal clinic. Most of these drugs fall under US FDA pregnancy categories B and C and few under categories A, X and N. CONCLUSION: This study reflects a good, safe and rational medication practice during pregnancy in various common disorders in a secondary care hospital and can be cited as an example to similar primary and secondary care hospitals. © The Author(s) 2015. DOI: 10.1177/0049475515609841 | **INTL** | **JAN TO JUN** | **PMID:**26450430 |
|  | David S(1), Abraham AM(1).  Epidemiological and clinical aspects on West Nile virus, a globally emergingpathogen.  Infect Dis (Lond). 2016 Aug;48(8):571-86. doi: 10.3109/23744235.2016.1164890.Epub 2016 May 20.  **Author information:** (1)a Department of Clinical Virology , Christian Medical College , Vellore , Tamil Nadu , India.  BACKGROUND: Since the isolation of West Nile virus (WNV) in 1937, in Uganda, it has spread globally, causing significant morbidity and mortality. While birds serve as amplifier hosts, mosquitoes of the Culex genus function as vectors. Humans and horses are dead end hosts. The clinical manifestations of West Nile infection in humans range from asymptomatic illness to West Nile encephalitis. METHODS: The laboratory offers an array of tests, the preferred method being detection of RNA and serum IgM for WNV, which, if detected, confirms the clinical diagnosis. Although no definitive antiviral therapy and vaccine are available for humans, many approaches are being studied. STUDY: This article will review the current literature of the natural cycle, geographical distribution, virology, replication cycle, molecular epidemiology, pathogenesis, laboratory diagnosis, clinical manifestations, blood donor screening for WNV, treatment, prevention and vaccines. DOI: 10.3109/23744235.2016.1164890 | **INTL** | **JUL TO DEC** | **PMID:**27207312 |
|  | Davis AM(1), Sampilo M(2), Gallagher KS(3), Dean K(4), Saroja MB(5), Yu Q(6), HeJ(6), Sporn N(7).  Treating rural paediatric obesity through telemedicine vs. telephone: Outcomesfrom a cluster randomized controlled trial.  J Telemed Telecare. 2016 Mar;22(2):86-95. doi: 10.1177/1357633X15586642. Epub2015 May 29.  **Author information:**  (1)University of Kansas Medical Center, Department of Pediatrics, USA Center for Children's Healthy Lifestyles & Nutrition, USA adavis6@kumc.edu. (2)Center for Children's Healthy Lifestyles & Nutrition, USA University of Kansas, Department of Clinical Child Psychology, USA. (3)Boston Children's Hospital, Harvard Medical School, Department of Psychiatry, USA. (4)University of Kansas Medical Center, Department of Pediatrics, USA. (5)Christian Medical College, Vellore, India. (6)University of Kansas Medical Center, Department of Biostatistics, USA. (7)University of Kansas, Department of Psychology, USA.  OBJECTIVE: The objective of the current study was to examine the feasibility of telemedicine vs. telephone for the delivery of a multidisciplinary weekly family-based behavioural group intervention to treat paediatric obesity delivered to families living in rural areas using a randomized controlled trial methodology. METHODS: 103 rural children and their families were recruited. Feasibility measures included participant satisfaction, session attendance and retention. Treatment outcome measures included child Body Mass Index z-score (BMIz), parent BMI, 24-hour dietary recalls, accelerometer data, the child behavior checklist and the behavioral pediatrics feeding assessment scale. RESULTS: Participants were highly satisfied with the intervention both via telemedicine and via telephone. Completion rates were much higher than for other paediatric obesity intervention programmes, and both methodologies were highly feasible. There were no differences in telemedicine and telephone groups on primary outcomes. CONCLUSION: Both telemedicine and telephone intervention appear to be feasible and acceptable methods of delivering paediatric obesity treatment to rural children. © The Author(s) 2015. DOI: 10.1177/1357633X15586642 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4830380  **PMID:**26026186 |
|  | D'Cunha AR(1), Kurian JJ(1), Jacob TJ(1).  Idiopathic female pseudohermaphroditism with urethral duplication and femalehypospadias.  BMJ Case Rep. 2016 Mar 10;2016. pii: bcr-2015-214172. doi:10.1136/bcr-2015-214172.  **Author information:**  (1)Department of Paediatric Surgery, Christian Medical College and Hospital,Vellore, Tamil Nadu, India.  Female hypospadias is a rare anomaly of the female urethra where it opens on the anterior vaginal wall anywhere between the introitus and the fornix. It is often associated with other genitourinary anomalies such as Cloacal malformation, female pseudohermaphroditism, nonneurogenic neurogenic bladder and urethral duplication. Idiopathic female pseudohermaphroditism is extremely rare, and most cases occur secondary to adrenogenital syndrome or maternal androgen exposure. We report a unique case of a 1-year and 4-month-old girl who presented with ambiguous genitalia and renal failure secondary to a non-neurogenic neurogenic bladder. On further evaluation, she was found to have urethral duplication with a hypospadiac female urethra. She initially underwent a vesicostomy and was further planned to undergo an appendicular Mitrofanoff at an older age. The mainstay of treatment in these cases includes relief of bladder outlet obstruction and recovery of renal function by adequate urinary drainage. Clitoral reduction, if cosmetically warranted, may be planned at puberty. 2016 BMJ Publishing Group Ltd. DOI: 10.1136/bcr-2015-214172 | **INTL** | **JAN TO JUN** | **PMID:**26965407 |
|  | Deepti Rana, Aleya Tabasuma and Murugan Ramalingam.  Cell-laden alginate/polyacrylamide beads as carriers for stem cell delivery: preparation and characterization  **RSC Adv., 2016, 6, 20475-20484.**   Stem cell based therapies employ engraftment or systemic administration methods for the delivery of stem cells into the target tissues to enhance their regenerative potential. However, majority of the stem cells were found to migrate away from the target site soon after the transplantation, which directly hinders their clinical efficacy, in particular while treating cartilage defects. Therefore, the present study was designed to explore the feasibility and efficacy of an alginate/polyacrylamide (Algi/PAAm) composite biomaterial in the form of cell-laden hydrogel beads as a suitable carrier system to be able to hold the stem cells at the target site and deliver them efficiently. Human bone marrow-derived mesenchymal stem cells (hBMSCs) have been used as a model cell. The beads prepared at an optimized concentration ratio were characterized to study their physicochemical properties. Furthermore, cell-encapsulated Algi/PAAm beads were evaluated for their biological properties. The result of this study has demonstrated that the Algi/PAAm beads with their optimal composition were able to maintain the viability of the encapsulated cells during the period of study, suggesting the cellular compatibility of the beads. Additionally, the encapsulated cells showed round morphology within the beads, in contrast to the 2D-cultured spindle-like shape of hBMSCs. Based on the experimental data obtained in this study, cell-laden Algi/PAAm beads may serve as a potential carrier system for stem cell delivery. | **INT** | **JAN TO JUN** | **NA** |
|  | Deshpande PA(1), Srivastava VM(2), Mani S(1), Anandhan S(1), Meena J(1), AbrahamA(1), Viswabandya A(1), George B(1), Srivastava A(1), Mathews V(1),Balasubramanian P(1).  Atypical BCR-ABL1 fusion transcripts in adult B-acute lymphoblastic leukemia,including a novel fusion transcript-e8a1.  Leuk Lymphoma. 2016 Oct;57(10):2481-4. doi: 10.3109/10428194.2016.1151512. Epub2016 Mar 4.  **Author information:** (1)a Department of Haematology , Christian Medical College , Vellore , Tamil Nadu, India ; (2)b Cytogenetics Unit , Christian Medical College , Vellore , Tamil Nadu , India. DOI: 10.3109/10428194.2016.1151512 | **INTL** | **JUL TO DEC** | **PMID:**26942999 |
|  | Devanga Ragupathi NK(1), Muthuirulandi Sethuvel DP(1), Shankar BA(1), MunusamyE(1), Anandan S(1), Veeraraghavan B(2).  Draft genome sequence of blaTEM-1-mediated cephalosporin-resistant Salmonellaenterica serovar Typhi from bloodstream infection.  J Glob Antimicrob Resist. 2016 Dec;7:11-12. doi: 10.1016/j.jgar.2016.06.003. Epub2016 Jul 12.  **Author information:** (1)Department of Clinical Microbiology, Christian Medical College, Vellore 632004, Tamil Nadu, India. (2)Department of Clinical Microbiology, Christian Medical College, Vellore 632 004, Tamil Nadu, India. Electronic address: [vbalaji@cmcvellore.ac.in](mailto:vbalaji@cmcvellore.ac.in).  Enteric fever is a major cause of concern in developing countries across the globe. The primary choice of antibiotics remains fluoroquinolones, followed by cephalosporins. Resistance to third-generation cephalosporins is rarely reported in Salmonella enterica serovar Typhi. This study reports the whole genome sequence of an S. Typhi isolate resistant to cefixime [minimum inhibitoryconcentration (MIC)=512μg/mL] by microbroth dilution. Interestingly, the isolate was negative for the cephalosporin resistance gene blaCTX-M by PCR, which is a known mechanism for higher cephalosporin resistance. The isolate was further subjected to next-generation sequencing that identified blaTEM-1B and blaDHA-1 genes in association with qnrB4 and sul1. blaTEM is a known gene coding for β-lactam resistance. In certain cases, overexpression of blaTEM was reported to result in cephalosporin resistance. This suggests that the high cefixime MIC would have been contributed by overexpression of blaTEM-1B. The blaTEM-1B gene was found to be associated with a promoter Px with -35 and -10 regions as TTAATA and TAAAGT, respectively. The promoter regions were unique, but the -10 region was similar to that found in Pa/Pb (previously reported promoter for blaTEM) with a single nucleotide change. In addition, an IncN plasmid was identified, which is usually reported in association with the most prevalent extended-spectrum β-lactamase (ESBL), metallo- and non-metallo-carbapenemase, and plasmid-mediated quinolone resistance (PMQR) genes. Plasmids such as IncN might possibly confer resistance and enhance spread. It is imperative to continuously monitor the drug resistance profile and evolving genetic elements. Copyright Â© 2016 International Society for Chemotherapy of Infection and Cancer. Published by Elsevier Ltd. All rights reserved. DOI: 10.1016/j.jgar.2016.06.003 | **INTL** | **JUL TO DEC** | **PMID:**27530999 |
|  | Dharmalingam SK(1), Pillai R, Karuppiah S, Sahajanandan R, George G.  Case report of aortopulmonary window with undiagnosed interrupted aortic arch:Role of transesophageal echocardiography.  Ann Card Anaesth. 2016 Jan-Mar;19(1):152-3. doi: 10.4103/0971-9784.173036.  **Author information:**  (1)Department of Anaesthesiology, Christian Medical College, Vellore, Tamil Nadu, India.  DOI: 10.4103/0971-9784.173036 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4900370  **PMID:**26750690 |
|  | Dinh DM(1,)(2), Ramadass B(3), Kattula D(3), Sarkar R(3), Braunstein P(4), TaiA(5), Wanke CA(1,)(2,)(3), Hassoun S(4), Kane AV(1), Naumova EN(2,)(3,)(6), KangG(2,)(5), Ward HD(1,)(2,)(3).  Longitudinal Analysis of the Intestinal Microbiota in Persistently Stunted YoungChildren in South India.  PLoS One. 2016 May 26;11(5):e0155405. doi: 10.1371/journal.pone.0155405.eCollection 2016.  **Author information:**  (1)Division of Geographic Medicine and Infectious Diseases, Tufts Medical Center, Boston, MA, United States of America. (2)Departments of Public Health and Community Medicine, Tufts University School of Medicine, Boston, MA, United States of America. (3)Department of Gastrointestinal Sciences, Christian Medical College, Vellore, India. (4)Department of Computer Sciences, Tufts University School of Engineering, Medford, MA, United States of America. (5)Department of Integrative Physiology and Pathobiology, Tufts University School of Medicine, Boston, MA, United States of America. (6)Gerald J. and Dorothy R. Friedman School of Nutrition Science and Policy, Tufts University, Boston, MA, United States of America.  Stunting or reduced linear growth is very prevalent in low-income countries. Recent studies have demonstrated a causal relationship between alterations in the gut microbiome and moderate or severe acute malnutrition in children in these countries. However, there have been no primary longitudinal studies comparing the intestinal microbiota of persistently stunted children to that of non-stunted children in the same community. In this pilot study, we characterized gut microbial community composition and diversity of the fecal microbiota of 10 children with low birth weight and persistent stunting (cases) and 10 children with normal birth weight and no stunting (controls) from a birth cohort every 3 months up to 2 years of age in a slum community in south India. There was an increase in diversity indices (P <0.0001) with increasing age in all children. However, there were no differences in diversity indices or in the rates of their increase with increasing age between cases and controls. The percent relative abundance of the Bacteroidetes phylum was higher in stunted compared to control children at 12 months of age (P = 0.043). There was an increase in the relative abundance of this phylum with increasing age in all children (P = 0.0380) with no difference in the rate of increase between cases and controls. There was a decrease in the relative abundance of Proteobacteria (P = 0.0004) and Actinobacteria (P = 0.0489) with increasing age in cases. The microbiota of control children was enriched in probiotic species Bifidobacterium longum and Lactobacillus mucosae, whereas that of stunted children was enriched in inflammogenic taxa including those in the Desulfovibrio genus and Campylobacterales order. Larger, longitudinal studies on the compositional and functional maturation of the microbiome in children are needed. DOI: 10.1371/journal.pone.0155405 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4881907  **PMID:**27228122 |
|  | Divyashree S(1), Nabarro LE(2,)(3), Veeraraghavan B(4), Rupali P(1).  Enteric fever in India: current scenario and future directions.  Trop Med Int Health. 2016 Oct;21(10):1255-1262. doi: 10.1111/tmi.12762. Epub 2016Sep 8.  **Author information:** (1)Department of Infectious Disease, Christian Medical College, Vellore, India. (2)Department of Infectious Disease, Christian Medical College, Vellore, India. laura.nabarro@phe.gov.uk. (3)Public Health England, London, UK. laura.nabarro@phe.gov.uk. (4)Department of Microbiology, Christian Medical College, Vellore, India.   Enteric fever is a major cause of morbidity and mortality in tropical areas worldwide. The Indian subcontinent bears the brunt of the disease, both in terms of absolute case numbers and drug-resistant strains. Recent phylogenetic studies suggest that the multidrug-resistant clade H58 originated in India and subsequently expanded through Asia and Africa. In Africa, it caused unrecognized outbreaks in areas previously considered free of the disease. In this study, we discuss the current status of enteric fever in India, the factors preventing its control and its future directions in this rapidly developing nation. © 2016 John Wiley & Sons Ltd. DOI: 10.1111/tmi.12762 | **INTL** | **JUL TO DEC** | **PMID:**27495900 |
|  | Doria AS(1), Keshava SN(2), Gibikote S(2).  Reply to "Hemosiderin Detection With Ultrasound: Reality or Myth?".  AJR Am J Roentgenol. 2016 Jan;206(1):W31-5. doi: 10.2214/AJR.15.15535.  **Author information:**  (1)1 University of Toronto, The Hospital for Sick Children, Toronto, ON, Canada. (2)2 Christian Medical College, Vellore, India.  **Comment on**  AJR Am J Roentgenol. 2015 Mar;204(3):W336-47.  AJR Am J Roentgenol. 2016 Jan;206(1):W30.  DOI: 10.2214/AJR.15.15535 | **INTL** | **JAN TO JUN** | **PMID:**26700362 |
|  | D'sa SR(1), Peter JV(1), Chacko B(1), Pichamuthu K(1), Sathyendra S(2).  Intra-aortic balloon pump (IABP) rescue therapy for refractory cardiogenic shockdue to scorpion sting envenomation.  Clin Toxicol (Phila). 2016;54(2):155-7. doi: 10.3109/15563650.2015.1116043. Epub2015 Dec 22.  **Author information:** (1)a Medical ICU , Christian Medical College , Vellore , Tamil Nadu , India; (2)b Department of Medicine , Christian Medical College , Vellore , Tamil Nadu, India.  BACKGROUND: Cardiomyopathy, cardiogenic shock or acute pulmonary oedema are well recognised complications of scorpion sting envenomation occurring in about 1-3% of patients. Current treatment recommendations include afterload reduction using prazosin and improving cardiac contractility with inotropes like dobutamine. We report the use of intra-aortic balloon pump (IABP) as rescue therapy in a patient with refractory cardiogenic shock due to Mesobuthus tamulus (Indian red scorpion) envenomation. CASE: A 32-year-old woman was referred 24 h after a scorpion sting. At presentation she was ventilated and in circulatory shock (systolic blood pressure < 50 mmHg). After admission, the patient had four cardiac arrests (three episodes of pulseless ventricular tachycardia/ventricular fibrillation and one episode of asystole) over the next few hours. Following resuscitation, despite a combination of dobutamine, noradrenaline, and adrenaline, blood pressure did not improve significantly. In view of persistent tachycardia (heart rate 160/min), catecholamine storm was suspected and prazosin was added. However, shock was refractory. Hence, IABP was considered as rescue therapy. Following initiation of IABP, there was improvement in cardiac function (improved ejection fraction) which translated to weaning of inotropes over 48 h and improved organ function (renal, respiratory) in the next 2-3 d. However, following extubation, on Day 8, she was noted to have features of hypoxic brain injury. This improved gradually. At discharge (Day 30) she was independent for activities of daily living and was able to mobilise without support. CONCLUSION: IABP could be generally considered as a rescue therapy in refractory cardiogenic shock in envenomations. DOI: 10.3109/15563650.2015.1116043 | **INTL** | **JUL TO DEC** | **PMID:**26696217 |
|  | Dutta AK(1), Chacko A(1).  Influence of environmental factors on the onset and course of inflammatory boweldisease.  World J Gastroenterol. 2016 Jan 21;22(3):1088-100. doi: 10.3748/wjg.v22.i3.1088.  **Author information:**  (1)Amit Kumar Dutta, Department of Gastrointestinal Sciences, Christian Medical College, Vellore 632004, India.  Numerous environmental factors have been linked with inflammatory bowel disease. These include smoking, diet, hygiene, drugs, geographical and psychosocial factors. These factors may either increase the risk of or protect against developing this condition and can also affect the course of illness in a positive or negative manner. A number of studies have examined the influence of environmental factors on inflammatory bowel diseases as a whole as well as on ulcerative colitis and Crohn's disease separately. As there are differences in the pathogenesis of ulcerative colitis and Crohn's disease, the effect of environmental factors on their onset and course is not always similar. Some factors have shown a consistent association, while reports on others have been conflicting. In this article we discuss the current evidence on the roles of these factors on inflammatory bowel disease, both as causative/protective agents and as modifiers of disease course. DOI: 10.3748/wjg.v22.i3.1088 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4716022  **PMID:**26811649 |
|  | Dutta AK(1), Danda S(2).  Restrictive Dermopathy.  Pediatr Neonatol. 2016 Jun;57(3):259. doi: 10.1016/j.pedneo.2015.09.005. Epub2015 Oct 28.  **Author information:**  (1)Medical Genetics Unit, Christian Medical College, Vellore, India. Electronic address: atanu.dutta05@gmail.com. (2)Medical Genetics Unit, Christian Medical College, Vellore, India.  DOI: 10.1016/j.pedneo.2015.09.005 | **INTL** | **JAN TO JUN** | **PMID:**26627141 |
|  | Dutta AK(1), Ekbote AV, Thomas N, Omprakash S, Danda S.  De Barsy syndrome type B presenting with cardiac and genitourinary abnormalities.  Clin Dysmorphol. 2016 Oct;25(4):190-1. doi: 10.1097/MCD.0000000000000142.  **Author information:** (1)Departments of aClinical Genetics bNeonatology, Christian Medical College, Vellore, India. DOI: 10.1097/MCD.0000000000000142 | **INTL** | **JUL TO DEC** | **PMID:**27379772 |
|  | Easow Mathew M(1), Sharma A, Aravindakshan R.  Splenectomy for people with thalassaemia major or intermedia.  Cochrane Database Syst Rev. 2016 Jun 14;(6):CD010517. doi:10.1002/14651858.CD010517.pub2.  **Author information:**  (1)South Asian Cochrane Network & Center, Prof. BV Moses Center for Evidence-Informed Health Care and Health Policy, Christian Medical College, Carman Block II Floor, CMC Campus, Bagayam, Vellore, Tamil Nadu, India, 632002.  BACKGROUND: Thalassaemia is a genetic disease of the haemoglobin protein in red blood cells. It is classified into thalassaemia minor, intermedia and major, depending on the severity of the disease and the genetic defect. Thalassaemia major and intermedia require frequent blood transfusions to compensate for the lack of well-functioning red blood cells, although this need is significantly less in thalassaemia intermedia.Damaged or defective red blood cells are normally eliminated in the spleen. In people with thalassaemia there is a large quantity of defective red blood cells which results in an enlarged hyperfunctioning spleen (splenomegaly). Removal of the spleen may thus prolong red blood cell survival by reducing the amount of red blood cells removed from circulation and may ultimately result in the reduced need for blood transfusions. OBJECTIVES: To assess the efficacy and safety of splenectomy in people with beta-thalassaemia major or intermedia. SEARCH METHODS: We searched the Cochrane Cystic Fibrosis and Genetic Disorders Review Group's Haemoglobinopathies Trials Register, compiled from searches of electronic databases and the handsearching of journals and conference abstract books. We also searched the reference lists of relevant articles and reviews.Date of the most recent search: 25 April 2016. SELECTION CRITERIA: We included randomised controlled studies and quasi-randomised controlled studies of people of any age with thalassaemia major or intermedia, evaluating splenectomy in comparison to conservative treatment (transfusion therapy and iron chelation) or other forms of splenectomy compared to each other (laparoscopic, open, radio-frequency). DATA COLLECTION AND ANALYSIS: Two authors independently selected and extracted data from the single included study using a customised data extraction form and assessed the risk of bias. MAIN RESULTS: One study, including 28 participants was included in the review; the results were described, primarily, in a narrative manner. The study assessed the feasibility of splenectomy using laparoscopy in comparison to open surgery. Given the lack of detail regarding the study methods beyond randomisation, the overall risk of bias for this study was unclear. The study was carried out over a period of 3.5 years, with each participant followed up only until discharge (less than one week after the intervention); it did not assess the majority of the outcomes outlined in this review (including two of the three primary outcomes, frequency of transfusion and quality of life). A total of three serious post-operative adverse events (the review's third primary outcome) were reported in the laparoscopic splenectomy group (one case of atelectasis and two cases of bleeding), compared to two events of atelectasis in the open surgery group; however, there were no significant differences between the groups for either atelectasis, risk ratio 0.50 (95% confidence interval 0.05 to 4.90) or for bleeding, risk ratio 5.00 (95% confidence interval 0.26 to 95.61). In addition, the study also reported three serious cases of intra-operative bleeding in the laparoscopic group which mandated conversion to open surgery, although the difference between groups was not statistically significant, risk ratio 7.00 (95% confidence interval 0.39 to 124.14). These effect estimates are based on very small numbers and hence are unreliable and imprecise. From this small study, there appeared to be an advantage for the laparoscopic approach, in terms of post-operative hospital stay, although the group difference was not large (median difference of 1.5 days, P = 0.03). AUTHORS' CONCLUSIONS: The review was unable to find good quality evidence, in the form of randomised controlled studies, regarding the efficacy of splenectomy for treating thalassaemia major or intermedia. The single included study provided little information about the efficacy of splenectomy, and compared open surgery and laparoscopic methods. Further studies need to evaluate the long-term effectiveness of splenectomy and the comparative advantages of surgical methods. Due to a lack of high quality evidence from randomised controlled studies, well-conducted observational studies may be used to answer this question. DOI: 10.1002/14651858.CD010517.pub2 | **INTL** | **JAN TO JUN** | **PMID:**27296775 |
|  | Edison E(1), Konkle BA(2), Goodeve AC(3,)(4).  Genetic analysis of bleeding disorders.  Haemophilia. 2016 Jul;22 Suppl 5:79-83. doi: 10.1111/hae.13024.  **Author information:** (1)Department of Haematology, Christian Medical College, Vellore, India. (2)Bloodworks Northwest and University of Washington, Seattle, WA, USA. (3)Sheffield Diagnostic Genetics Service, Sheffield Children's NHS Foundation Trust, heffield, UK. (4)Department of Infection, Immunity and Cardiovascular Disease, University of Sheffield, Sheffield, UK.  Molecular genetic analysis of inherited bleeding disorders has been practised for over 30 years. Technological changes have enabled advances, from analyses using extragenic linked markers to next-generation DNA sequencing and microarray analysis. Two approaches for genetic analysis are described, each suiting their environment. The Christian Medical Centre in Vellore, India, uses conformation-sensitive gel electrophoresis mutation screening of multiplexed PCR products to identify candidate mutations, followed by Sanger sequencing confirmation of variants identified. Specific analyses for F8 intron 1 and 22 inversions are also undertaken. The MyLifeOurFuture US project between the American Thrombosis and Hemostasis Network, the National Hemophilia Foundation , Bloodworks Northwest and Biogen uses molecular inversion probes (MIP) to capture target exons, splice sites plus 5' and 3' sequences and to detect F8 intron 1 and 22 inversions. This allows screening for all F8 and F9 variants in one sequencing run of multiple samples (196 or 392). Sequence variants identified are  Subsequentl y confirmed by a diagnostic laboratory. After having identified variants in genes of interest through these processes, a systematic procedure determining their likely pathogenicity should be applied. Several scientific societies have prepared guidelines. Systematic analysis of the available evidence facilitates reproducible scoring of likely pathogenicity. Documentation of frequency in population databases of variant prevalence and in locus-specific mutation databases can provide initial information on likely pathogenicity. Whereas null mutations are often pathogenic, missense and splice site variants often require in silico analyses to predict likely pathogenicity and using an  accepted suite of tools can help standardize their documentation. © 2016 John Wiley & Sons Ltd. DOI: 10.1111/hae.13024 | **INTL** | **JUL TO DEC** | **PMID:**27405681 |
|  | Fenwick AL(1), Kliszczak M(2), Cooper F(3), Murray J(3), Sanchez-Pulido L(3),Twigg SR(1), Goriely A(1), McGowan SJ(4), Miller KA(1), Taylor IB(1), Logan C(3);WGS500 Consortium, Bozdogan S(5), Danda S(6), Dixon J(7), Elsayed SM(8), ElsobkyE(8), Gardham A(9), Hoffer MJ(10), Koopmans M(10), McDonald-McGinn DM(11), SantenGW(10), Savarirayan R(12), de Silva D(13), Vanakker O(14), Wall SA(15), WilsonLC(9), Yuregir OO(16), Zackai EH(11), Ponting CP(3), Jackson AP(3), WilkieAO(17), Niedzwiedz W(18), Bicknell LS(19).  Mutations in CDC45, Encoding an Essential Component of the Pre-initiationComplex, Cause Meier-Gorlin Syndrome and Craniosynostosis.  Am J Hum Genet. 2016 Jul 7;99(1):125-38. doi: 10.1016/j.ajhg.2016.05.019. Epub2016 Jun 30.  **Author information:** (1)Clinical Genetics Group, MRC Weatherall Institute of Molecular Medicine, University of Oxford, John Radcliffe Hospital, Oxford OX3 9DS, UK. (2)ClinicalGenetics Group, MRC Weatherall Institute of Molecular Medicine, University of Oxford, John Radcliffe Hospital, Oxford OX3 9DS, UK; Department of Oncology, MRC Weatherall Institute of Molecular Medicine, University of Oxford, Oxford OX3 9DS, UK. (3)MRC Human Genetics Unit, IGMM, University of Edinburgh, Edinburgh EH4 2XU, UK. (4)Computational Biology Research Group, MRC Weatherall Institute ofMolecular Medicine, University of Oxford, John Radcliffe Hospital, Oxford OX39DS, UK. (5)Department of Medical Genetics, Mersin University, Mersin, 33343 Cukurova, Turkey. (6)Department of Clinical Genetics, Christian Medical College and Hospital, Vellore, Tamil Nadu 632004, India. (7)Genetic Health Service NZ-South Island Hub, Christchurch Hospital, Christchurch, Canterbury 8140, New Zealand. (8)Children's Hospital, Ain Shams University, Cairo 11566, Egypt. (9)North East Thames Regional Genetics Service, Great Ormond Street Hospital for Children NHS Foundation Trust, Great Ormond Street Hospital, London WC1N 3JH, UK. (10)Department of Clinical Genetics, Leiden University Medical Center, 2300 RC Leiden, the Netherlands. (11)Clinical Genetics, The Children's Hospital of Philadelphia, 34th & Civic Center Boulevard, Philadelphia, PA 19104, USA. (12)Victorian Clinical Genetics Services, Murdoch Children's Research Institute, University of Melbourne, Melbourne, VIC 3052, Australia. (13)Department of Physiology, Faculty of Medicine, University of Kelaniya, Ragama, Gampaha GQ 11010, Sri Lanka. (14)Center for Medical Genetics, Ghent University Hospital, 9000 Ghent, Belgium. (15)Craniofacial Unit, Department of Plastic and Reconstructive Surgery, Oxford University Hospitals NHS Foundation Trust, John Radcliffe Hospital, Oxford OX3 9DU, UK. (16)Genetic Diagnosis Center, Adana Numune Training and Research Hospital, Cukurova, Adana, 01170, Turkey. (17)Clinical Genetics Group, MRC Weatherall Institute of Molecular Medicine, University of Oxford, John Radcliffe Hospital, Oxford OX3 9DS, UK; Craniofacial Unit, Department of Plastic and Reconstructive Surgery, Oxford University Hospitals NHS Foundation Trust, John Radcliffe Hospital, Oxford OX3 9DU, UK. (18)Department of Oncology, MRC Weatherall Institute of Molecular Medicine, University of Oxford, Oxford OX3 9DS, UK. Electronic address: wojciech.niedzwiedz@imm.ox.ac.uk. (19)MRC Human Genetics Unit, IGMM, University of Edinburgh, Edinburgh EH4 2XU, UK; Department of Pathology, Dunedin School of Medicine, University of Otago, Dunedin, Otago 9016, New Zealand. Electronic address: [louise.bicknell@otago.ac.nz](mailto:louise.bicknell@otago.ac.nz).  DNA replication precisely duplicates the genome to ensure stable inheritance of genetic information. Impaired licensing of origins of replication during the G1 phase of the cell cycle has been implicated in Meier-Gorlin syndrome (MGS), a disorder defined by the triad of short stature, microtia, and a/hypoplastic patellae. Biallelic partial loss-of-function mutations in multiple components of the pre-replication complex (preRC; ORC1, ORC4, ORC6, CDT1, or CDC6) as well as de novo stabilizing mutations in the licensing inhibitor, GMNN, cause MGS. Here we report the identification of mutations in CDC45 in 15 affected individuals from 12 families with MGS and/or craniosynostosis. CDC45 encodes a component of both the pre-initiation (preIC) and CMG helicase complexes, required for initiation of DNA replication origin firing and ongoing DNA synthesis during S-phase itsel f, respectively, and hence is functionally distinct from previously identified MGS-associated genes. The phenotypes of affected individuals range from syndromic coronal craniosynostosis to severe growth restriction, fulfilling diagnostic criteria for Meier-Gorlin syndrome. All mutations identified were biallelic and included synonymous mutations altering splicing of physiological CDC45 transcripts, as well as amino acid substitutions expected to result inpartial loss of function. Functionally, mutations reduce levels of full-length transcripts and protein in subject cells, consistent with partial loss of CDC45 function and a predicted limited rate of DNA replication and cell proliferation. Our findings therefore implicate the preIC as an additional protein complexinvolved in the etiology of MGS and connect the core cellular machinery of genomereplication with growth, chondrogenesis, and cranial suture homeostasis. Copyright © 2016 American Society of Human Genetics. Published by Elsevier Inc. All rights reserved. DOI: 10.1016/j.ajhg.2016.05.019 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5005452  **PMID:**27374770 |
|  | Fischer K(1), Poonnoose P(2), Dunn AL(3), Babyn P(4), Manco-Johnson MJ(5), DavidJA(6), van der Net J(7), Feldman B(8), Berger K(9), Carcao M(10), de KleijnP(11), Silva M(12), Hilliard P(13), Doria A(14), Srivastava A(15), BlanchetteV(10); participants of the International Symposium on Outcome Measures inHemophilic Arthropathy.  Collaborators: Avila L, Boma-Fischer L, Brandao L, Busch MT, Castro D, Chiu A,Funk S, Luke B, Manco-Johnson M, Mohanta A, Monahan P, St-Louis J, Shupak R,Stimec J, Teitel J, Zourikian N, Bonanad S, Gouw S, Querol F, Santagostino E,Solimeno PL, von Mackensen S, Wells A, Carneiro JD, Gibokte S, Keshava SN, MattaM, Natesirinilkul R, Ozelo M, Poonoose P, Sakamoto F, Sun J, Uchoa M, Wu R.  Choosing outcome assessment tools in haemophilia care and research: amultidisciplinary perspective.  Haemophilia. 2016 Sep 15. doi: 10.1111/hae.13088. [Epub ahead of print]  **Author information:** (1)Van Creveldkliniek, University Medical Center Utrecht, Utrecht, The Netherlands. k.fischer@umcutrecht.nl. (2)Department of Orthopaedics, Christian Medical College, Vellore, Tamil Nadu, India. (3)Division of Hematology and Oncology, Nationwide Children's Hospital and The Ohio State University, Columbus, OH, USA. (4)Department of Medical Imaging, University of Saskatchewan and Saskatoon Health Region Royal University Hospital, Saskatoon, SK, Canada. (5)Section of Hematology/Oncology/Bone Marrow Transplantation, Department of Pediatrics, University of Colorado Anschutz Medical Campus and Children's Hospital, Aurora, CO, USA. (6)Department of PMR, Christian Medical College, Vellore, Tamil Nadu, India. (7)Child Health Services, Child Development and Exercise Center, University Medical Center and Children's Hospital, Utrecht, The Netherlands. (8)Division of Rheumatology, Department of Paediatrics and Child Health Evaluative Sciences, Research Institute, Hospital for Sick Children, University of Toronto, Toronto, ON, Canada. (9)Division of Haematology/Oncology, University Hospital of Munich, Munich, Germany. (10)Division of Haematology/Oncology, Department of Paediatrics and Child Health Evaluative Sciences, Research Institute, Hospital for Sick Children, University of Toronto, Toronto, ON, Canada. (11)Department of Rehabilitation, Nursing Science and Sports, and Van Creveldkliniek, University Medical Center Utrecht, Utrecht, The Netherlands. (12)Department of Orthopaedic Surgery, Orthopaedic Institute for Children, David Geffen School of Medicine at UCLA, Los Angeles, CA, USA. (13)Department of Rehabilitation, Hospital for Sick Children, University of Toronto, Toronto, ON, Canada. (14)Department of Diagnostic Imaging, Research Institute, Hospital for Sick Children, University of Toronto, Toronto, ON, Canada. (15)Department of Haematology, Christian Medical College, Vellore, Tamil Nadu, India.  INTRODUCTION: The implementation of early long-term, regular clotting factor concentrate (CFC) replacement therapy ('prophylaxis') has made it possible to offer boys with haemophilia a near normal life. Many different regimens have reported favourable results, but the optimum treatment regimens have not been established and the cost of prophylaxis is very high. Both for optimizing treatment and reimbursement issues, there is a need to provide objective evidence of both short- and long-term results and benefits of prophylactic regimens. AIMS: This report presents a critical review of outcome measures for use in the assessment of musculoskeletal health in persons with haemophilia according to the International Classification of Functioning, Disability and Health (ICF). This framework considers structural and functional changes, activities and  participation in a context of both personal and environmental factors. METHODS: Results were generated by a combination of a critical review of available literature plus expert opinion derived from a two day consensus conference between 48 health care experts from different disciplines involved in haemophilia assessment and care. Outcome tools used in haemophilia were reviewed for reliability and validity in different patient groups and for resources required.  RESULTS AND CONCLUSION: Recommendations for choice of outcome tools were made according to the ICF domains, economic setting, and reason for use (clinical or research). The next step will be to identify a 'core' set of outcome measures for use in clinical care or studies evaluating treatment. © 2016 The Authors. Haemophilia Published by John Wiley & Sons Ltd. DOI: 10.1111/hae.13088 | **INTL** | **JUL TO DEC** | **PMID:**27633342 |
|  | Fischer K(1,)(2), Collins PW(3), Ozelo MC(4,)(5), Srivastava A(6), YoungG(7,)(8), Blanchette VS(9,)(10).  When and how to start prophylaxis in boys with severe hemophilia withoutinhibitors: communication from the SSC of the ISTH.  J Thromb Haemost. 2016 May;14(5):1105-9. doi: 10.1111/jth.13298. Epub 2016 Apr 4.  **Author information:**  (1)Van Creveldkliniek, University Medical Center Utrecht, Utrecht, the Netherlands. (2)Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht, the Netherlands. (3)Arthur Bloom Haemophilia Centre, School of Medicine, Cardiff University, Cardiff, UK. (4)INCT do Sangue Hemocentro Unicamp, University of Campinas, Campinas, Brazil. (5)Faculty of Medical Sciences Unicamp, University of Campinas, Campinas, Brazil. (6)Department of Haematology, Christian Medical College, Vellore, India. (7)Hemostasis and Thrombosis Center, Children's Hospital, Los Angeles, CA, USA. (8)University of Southern California Keck School of Medicine, Los Angeles, CA, USA. (9)Pediatric Thrombosis and Hemostasis Program, Hospital for Sick Children, University of Toronto, Toronto, Canada. (10)Department of Pediatrics, University of Toronto, Toronto, Canada.  DOI: 10.1111/jth.13298 | **INTL** | **JAN TO JUN** | **PMID:**27186714 |
|  | Flenady V(1,)(2), Wojcieszek AM(3,)(4), Fjeldheim I(5), Friberg IK(5), NankabirwaV(6,)(7), Jani JV(5,)(7), Myhre S(5), Middleton P(4,)(8), Crowther C(8,)(9),Ellwood D(4,)(10), Tudehope D(3), Pattinson R(11), Ho J(12), Matthews J(13),Bermudez Ortega A(14), Venkateswaran M(5,)(7), Chou D(15), Say L(15), Mehl G(15),Frøen JF(4,)(5,)(7). eRegistries: indicators for the WHO Essential Interventions for reproductive,maternal, newborn and child health.  BMC Pregnancy Childbirth. 2016 Sep 30;16(1):293.  **Author information:** (1)Mater Research Institute, The University of Queensland (MRI-UQ), Brisbane, Australia. vicki.flenady@mater.uq.edu.au. (2)International Stillbirth Alliance, Bristol, UK. vicki.flenady@mater.uq.edu.au. (3)Mater Research Institute, The University of Queensland (MRI-UQ), Brisbane, Australia. (4)International Stillbirth Alliance, Bristol, UK. (5)Department of International Public Health, Norwegian Institute of Public Health, Oslo, Norway. (6)Department of Epidemiology and Biostatics, School of Public Health, College of Health Sciences, Makerere University, Kampala, Uganda. (7)Centre for Intervention Science in Maternal and Child Health (CISMAC), Centre for International health, University of Bergen, Bergen, Norway. (8)South Australian Health and Medical Research Institute (SAHMRI), Adelaide, Australia. (9)Liggins Institute, University of Auckland, Auckland, New Zealand. (10)Griffith University & Gold Coast University Hospital, Gold Coast, Australia. (11)Medical Research Council, University of Pretoria, Pretoria, South Africa. (12)Penang Medical College and Penang Hospital, Penang, Malaysia. (13)Christian Medical College, Vellore, Tamil Nadu, India. (14)The Australian Nurse Family Partnership Program National Program Centre, Abt Australia, Brisbane, Australia. (15)Department of Reproductive Health and Research, World Health Organization, Geneva, Switzerland.  BACKGROUND: Electronic health registries - eRegistries - can systematically collect relevant information at the point of care for reproductive, maternal, newborn and child health (RMNCH). However, a suite of process and outcome indicators is needed for RMNCH to monitor care and to ensure comparability between settings. Here we report on the assessment of current global indicators and the development of a suite of indicators for the WHO Essential Interventions for use at various levels of health care systems nationally and globally. METHODS: Currently available indicators from both household and facility surveys were collated through publicly available global databases and respective survey instruments. We then developed a suite of potential indicators and associated data points for the 45 WHO Essential Interventions spanning preconception to newborn care. Four types of performance indicators were identified (where applicable): process (i.e. coverage) and outcome (i.e. impact) indicators for both screening and treatment/prevention. Indicators were evaluated by an international expert panel against the eRegistries indicator evaluation criteria and further refined based on feedback by the eRegistries technical team. RESULTS: Of the 45 WHO Essential Interventions, only 16 were addressed in any of the household survey data available. A set of 216 potential indicators was developed. These indicators were generally evaluated favourably by the panel, but difficulties in data ascertainment, including for outcome measures of cause-specific morbidity and mortality, were frequently reported as barriers to the feasibility of indicators. Indicators were refined based on feedback, culminating in the final list of 193 total unique indicators: 93 for preconception and antenatal care; 53 for childbirth and postpartum care; and 47 for newborn and small and ill baby care. CONCLUSIONS: Large gaps exist in the availability of information currently collected to support the implementation of the WHO Essential Interventions. The development of this suite of indicators can be used to support the implementation of eRegistries and other data platforms, to ensure that data are utilised to support evidence-based practice, facilitate measurement and accountability, and improve maternal and child health outcomes. DOI: 10.1186/s12884-016-1049-y | **INTL** | **JUL TO DEC** | **PMCID: PMC**5045645  **PMID:**27716088 |
|  | Fletcher GJ(1), Anantharam R(1), Radhakrishnan K(1), Karunakaran A(1), AbrahamP(2).  Cost-Effective In-House Neutralization Assay for the Confirmation of HBeAg.  J Clin Lab Anal. 2016 Nov;30(6):1146-1149. doi: 10.1002/jcla.21995. Epub 2016 May21.  **Author information:** (1)Department of Clinical Virology, Christian Medical College, Vellore, India. (2)Department of Clinical Virology, Christian Medical College, Vellore, India. priyaabraham@cmcvellore.ac.in.  BACKGROUND & AIM: Hepatitis B virus-e-antigen (HBeAg) is an affordable viral marker to assess viral replication kinetics and response to antiviral therapy. In the absence of confirmatory assays, discrepant or false-positive HBeAg results are resolved by screening for other HBV markers. We standardized an in-house HBeAg neutralization assay (HBeAg-NT) to confirm HBeAg in clinical samples. METHODS: The performance and reliability of this assay were evaluated by first WHO International Standard for HBeAg (first WHO-IS HBeAg) from Paul Ehrlich Institute and clinical samples (n = 150) from chronic HBV carriers. Of these, 71 HBeAg-positive sera were used for HBeAg-NT. RESULTS: Concentrations spanning 0.25-10 U of first WHO-IS HBeAg and clinical samples (S/Co ranges from 1.00 to 10.00) were neutralized completely in the HBeAg-NT.  CONCLUSIONS: HBeAg-NT is a simple, cost-effective, and reliable direct approach to confirm HBeAg in clinical samples which precludes the need for screening additional HBV markers in low resource settings. © 2016 Wiley Periodicals, Inc. DOI: 10.1002/jcla.21995 | **INTL** | **JUL TO DEC** | **PMID:**27207380 |
|  | Francis MR(1), Sarkar R(1), Roy S(1), Jaffar S(2), Mohan VR(3), Kang G(1), BalrajV(4).  Effectiveness of Membrane Filtration to Improve Drinking Water: AQuasi-Experimental Study from Rural Southern India.  Am J Trop Med Hyg. 2016 Nov 2;95(5):1192-1200. Epub 2016 Sep 6.  **Author information:** (1)Division of Gastrointestinal Sciences, Christian Medical College, Vellore,India. (2)London School of Hygiene and Tropical Medicine, London, United Kingdom. (3)Department of Community Health, Christian Medical College, Vellore, India. (4)Society for Applied Studies, Vellore, India. [vinoharbalraj@gmail.com](mailto:vinoharbalraj@gmail.com).  Since point-of-use methods of water filtration have shown limited acceptance in Vellore, southern India, this study evaluated the effectiveness of decentralized membrane filtration 1) with safe storage, 2) without safe storage, versus 3) no intervention, consisting of central chlorination as per government guidelines, in improving the microbiological quality of drinking water and preventing childhood diarrhea. Periodic testing of water sources, pre-/postfiltration samples, and household water, and a biweekly follow up of children less than 2 years of age was done for 1 year. The membrane filters achieved a log reduction of 0.86 (0.69-1.06), 1.14 (0.99-1.30), and 0.79 (0.67-0.94) for total coliforms, fecal coliforms, and Escherichia coli, respectively, in field conditions. A 24% (incidence rate ratio, IRR [95% confidence interval, CI] = 0.76 [0.51-1.13]; P = 0.178) reduction in diarrheal incidence in the intervention village with safe storage and a 14% (IRR [95% CI] = 1.14 [0.75-1.77]; P = 0.530) increase in incidence for the intervention village without safe storage versus no intervention village was observed, although not statistically significant. Microbiologically, the membrane filters decreased fecal contamination; however, provision of decentralized membrane-filtered water with or without safe storage was not protective against childhood diarrhea. © The American Society of Tropical Medicine and Hygiene. DOI: 10.4269/ajtmh.15-0675 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5094238  **PMID:**27601525 |
|  | G C(1), D S F(2), S S(3), M S(4), S G(5).  Indole-3-acetic acid/diol based pH-sensitive biological macromolecule forantibacterial, antifungal and antioxidant applications.  Int J Biol Macromol. 2016 Nov 22;95:363-375. doi: 10.1016/j.ijbiomac.2016.11.068.[Epub ahead of print]  **Author information:** (1)Department of Chemistry, Periyar University, Salem 636011, Tamilnadu, India; Department of Chemistry, Bangalore College of Engineering and Technology, Chandapura, Bangalore 560081, India. Electronic address: chitramuralikrishnan@gmail.com. (2)Department of Chemistry, C. Abdul Hakeem College of Engineering and Technology, Melvisharam 632509, Tamilnadu, India. Electronic address: loyolafrank@yahoo.co.in. (3)Department of Chemistry, C. Abdul Hakeem College of Engineering and Technology, Melvisharam 632509, Tamilnadu, India. Electronic address: srsudarsan29@gmail.com. (4)Research and Development Centre, Bharathiar University, Coimbatore 641046, India. Electronic address: msakthi81986@gmail.com. (5)PG & Research Department of Chemistry, Muthurangam Government Arts College, Vellore 632002, Tamilnadu, India. Electronic address: [sai\_gugan@yahoo.com](mailto:sai_gugan@yahoo.com).  Indole-3-acetic acid (IAA)/diol based pH-sensitive biopolymeric hydrogels with tunable biological properties (cytotoxicity, anti-oxidant and anti-fungal) have been synthesized via condensation polymerization. The present study focused on the synthesis of heterocyclic hydrogel using citric acid (CA), indole-3-acetic acid (IAA) and diethylene glycol (DEG) by condensation polymerization. The hydrogels revealed a pH-sensitive swelling behaviour, with increased swelling in acidic media, then turns to decreased the swelling in the basic media. The hydrogel samples were tested for antifungal activity against Aspergillus fumigates, Rhizopusoryzae and Candida albicans at different concentrations using ketoconazole as positive control and DMSO as negative control for antifungal activity. Antioxidant activity increasing nature in DPPH than NO radical compared with rutin and confirmed non toxic property using cytotoxicity analysis. The biopolymeric hydrogels were characterized by Fourier transform infrared (FT-IR) spectroscopy, (1)H NMR,(13)C NMR, TGA, DSC followed by scanning electron microscopy (SEM). Such hydrogels with antioxidant properties is recommended for medical applications such as bandages, catheters, drains and tubes to prevent infection. Copyright Â© 2016 Elsevier B.V. All rights reserved. DOI: 10.1016/j.ijbiomac.2016.11.068 | **INTL** | **JUL TO DEC** | **PMID:**27888010 |
|  | Ganapule A(1), Jain P, Nambiar FA, Korula A, Abraham A, Mammen J, George B,Mathews V, Srivastava A, Viswabandya A.  Surgical procedures in patients with Glanzmann's thrombasthenia: case series andliterature review.  Blood Coagul Fibrinolysis. 2016 Jun 6. [Epub ahead of print]  **Author information:**  (1)aDepartment of Haematology bDepartment of Immunohaematology and Transfusion Medicine, Christian Medical College, Vellore, Tamil Nadu, India.  Glanzmann's thrombasthenia is a rare platelet function disorder with an autosomal recessive pattern of inheritance. Achieving haemostasis in such patients who undergo surgical procedures always poses a significant challenge. Herein we report six cases of Glanzmann's thrombasthenia, who underwent nine surgeries under the cover of platelet-rich concentrates with or without recombinant activated factor VII . Of these, five were major surgeries such as thyroidectomy, laparotomy, Hartmann's procedure, reversal of Hartmann's procedure and a complete dental extraction. All five procedures were successfully done without any major bleeding. The major cost incurred in these procedures is due to the large number of blood products used and recombinant activated factor VII if used. DOI: 10.1097/MBC.0000000000000524 | **INTL** | **JAN TO JUN** | **PMID:**27273143 |
|  | Gandhi DJ(1), Dhaded SM(2), Ravi MD(3), Dubey AP(4), Kundu R(5), Lalwani SK(6),Chhatwal J(7), Mathew LG(8), Gupta M(9), Sharma SD(10), Bavdekar SB(11), JayanthMV(12), Ravinuthala S(12), Sil A(12), Dhingra MS(12).  Safety, immune lot-to-lot consistency and non-inferiority of a fully liquidpentavalent DTwp-HepB-Hib vaccine in healthy Indian toddlers and infants.  Hum Vaccin Immunother. 2016 Apr 2;12(4):946-54.  doi:10.1080/21645515.2015.1100779. Epub 2015 Nov 18.  **Author information:**  (1)a Department of Pediatrics , SBKS Medical College , Vadodara , India. (2)b Department of Pediatrics , Jawaharlal Nehru Medical College , Belgaum , India (3)c Department of Pediatrics , JSS Medical College , Mysore , India. (4)d Department of Pediatrics , Maulana Azad Medical College , Delhi , India. (5)e Department of Pediatrics , Institute of Child Health , Kolkata , India. (6)f Department of Pediatrics , Bharati Vidyapeeth Deemed University Medical College , Pune , India. (7)g Department of Pediatrics , Christian Medical College , Ludhiana , India. (8)h Department of Pediatrics , Christian Medical College , Vellore , India. (9)i Department of Community Medicine , School of Public Health, Post Graduate Institute of Medical Education & Research , Chandigarh , India. (10)j Department of Pediatrics , Sawai Man Singh Medical College , Jaipur , India. (11)k Department of Pediatrics , Topiwala Nair Medical College , Mumbai , India. (12)l Shantha Biotechnics Private Limited , Hyderabad , India.  Pentavalent combination vaccines are important tools to strengthen the immunization programs in numerous countries throughout the world. A large number of countries have recognized the value of combination vaccines and have introduced whole cell pentavalent vaccines into their immunization programs. A phase III, multi-center, randomized, single blinded study of a fully liquid pentavalent DTwP-HepB-Hib investigational vaccine (Shan5™) was conducted across India in 2 cohorts: 15 toddlers were evaluated for safety and immunogenicity following a single booster dose (Cohort 1) followed by 1085 infants (Cohort 2) evaluated for immunogenicity and safety following 3-dose primary immunization of the investigational vaccine or a locally licensed comparator vaccine (Pentavac SD). Immune consistency analysis among 3 lots of the investigational vaccine, and immune non-inferiority analysis of pooled (3 lots) data of investigational vaccine vs. comparator vaccine were carried out in cohort 2. The vaccines demonstrated comparable safety and immune responses in cohort 1. In cohort 2, equivalent immune consistency among 3 lots was observed for all antigens except whole cell pertussis antigens, where a marginal variation was observed which was linked to the low power of the test and concluded to not have any clinical significance. Immune non-inferiority against the comparator vaccine was demonstrated for all 5 antigens. Safety results were comparable between vaccine groups. This investigational, fully-liquid, whole-cell pertussis (wP) containing new pentavalent vaccine was found to be safe and immunologically non-inferior to the licensed comparator vaccine. DOI: 10.1080/21645515.2015.1100779 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4962968  **PMID:**26580093 |
|  | Ganesan S(1), Alex AA(1), Chendamarai E(1), Balasundaram N(1), Palani HK(1),David S(1), Kulkarni U(1), Aiyaz M(2), Mugasimangalam R(2), Korula A(1), AbrahamA(1), Srivastava A(1), Padua RA(3,)(4), Chomienne C(3,)(4), George B(1),Balasubramanian P(1), Mathews V(1).  Rationale and efficacy of proteasome inhibitor combined with arsenic trioxide inthe treatment of acute promyelocytic leukemia.  Leukemia. 2016 Nov;30(11):2169-2178. doi: 10.1038/leu.2016.227. Epub 2016 Aug 18.  **Author information:** (1)Department of Haematology, Christian Medical College, Vellore, India. (2)Genotypic Technology, Bengaluru, India. (3)UMR-S1131, Hôpital Saint Louis, Paris, France. (4)Institut Universitaire d' Hématologie, Universite Paris Diderot, Paris, France.  Arsenic trioxide (ATO) mediates PML-RARA (promyelocytic leukemia-retinoic acid receptor-α) oncoprotein degradation via the proteasome pathway and this degradation appears to be critical for achieving cure in acute promyeloytic leukemia (APL). We have previously demonstrated significant micro-environment-mediated drug resistance (EMDR) to ATO in APL. Here we demonstrate that this EMDR could be effectively overcome by combining a proteasome inhibitor (bortezomib) with ATO. A synergistic effect on combining these two agents in vitro was noted in both ATO-sensitive and ATO-resistant APL cell lines. The mechanism of this synergy involved downregulation of the nuclear factor-κB pathway, increase in unfolded protein response (UPR) and an increase in reactive oxygen species generation in the malignant cell. We also noted that PML-RARA oncoprotein is effectively cleared with this combination in spite of proteasome inhibition by bortezomib, and that this clearance is mediated through a p62-dependent autophagy pathway. We further demonstrated that proteasome inhibition along with ATO had an additive effect in inducing autophagy. The beneficial effect of this combination was further validated in an animal model and in an on-going clinical trial. This study raises the potential of a non-myelotoxic proteasome inhibitor replacing anthracyclines in the management of high-risk and relapsed APL. DOI: 10.1038/leu.2016.227 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5097069  **PMID:**27560113 |
|  | Garg P(1), Gupta N(2), Arora M(3). Monoarticular Poncet Disease after Pulmonary Tuberculosis: A Rare Case Report andReview of Literature.  Perm J. Summer 2016;20(3). doi: 10.7812/TPP/15-199. Epub 2016 Jul 15.  **Author information:** (1)Pathologist at the University College of Medical Sciences and Guru Tag Bahadur Hospital in Dilshad Garden, Delhi, India. drparitoshgarg@gmail.com. (2)Fellow in Clinical Immunology and Rheumatology at the Christian Medical College and Hospital in Vellore, Tamil Nadu, India. nik.gupta4u@gmail.com. (3)Orthopedician at the University College of Medical Sciences and Guru Tag Bahadur Hospital in Dilshad Garden, Delhi, India. [drmkarora@yahoo.com](mailto:drmkarora@yahoo.com).  INTRODUCTION: Tuberculosis is a major health problem worldwide, more so in Asian countries and especially India. Being a communicable disease, it can affect the lives of many people. Tuberculosis has varied manifestations and can affect almost every part of the human body. Pulmonary tuberculosis is the most common form. Poncet disease (tuberculous rheumatism) is a polyarticular arthritis that occurs during acute tuberculosis infection in which no mycobacterial involvement can be found or no other known cause of polyarthritis is detected. CASE PRESENTATION: We describe an atypical presentation of active pulmonary tuberculosis with monoarticular Poncet disease of the right knee in a 24-year-old woman. DISCUSSION: The diagnosis of Poncet disease is mainly clinical with exclusion of other causes. It generally presents as an acute or subacute form; however, chronic forms have been described in the literature. DOI: 10.7812/TPP/15-199 | **INT** | **JUL TO DEC** | **PMCID: PMC**4991904  **PMID:**27455057 |
|  | Garge S(1), Keshava SN(1), Moses V(1), Mammen S(1), Ahmed M(1), Chiramel GK(1),Cherian V(2), Manasseh N(2), George B(3), Mathews V(3), Abraham A(3), ViswabandyaA(3), Srivastava A(3), Gibikote S(1).  Role of endovascular embolization in treatment of acute bleeding complications inhaemophilia patients.  Br J Radiol. 2016 Jul 12:20151064. [Epub ahead of print]  **Author information:** (1)1 Department of Radiology, Christian Medical College, Vellore, India. (2)2 Department of Orthopedics, Christian Medical College, Vellore, India. (3)3 Department of Hematology, Christian Medical College, Vellore, India.  OBJECTIVE: Bleeding complications either spontaneously or post-operatively are very common in patients with haemophilia. Sometimes these bleeding complications remain unresponsive despite being on high dose of clotting factor replacement. The aim was to assess the role of endovascular embolization in patients with haemophilia in (a) treating haemorrhagic complications due to local causes refractory to clotting factors substitution and (b) reducing intraoperative blood loss in elective pseudotumour surgery.  METHODS: 10 patients seen between January 2000 and April 2015 with severe haemophilia A or B who had unexplained profuse persistent bleeding or required large pseudotumour excision and were taken up for digital subtraction angiography and embolization were included in the study. Data of all these patients were reviewed using the computerized hospital information system and picture archiving and communication system. Details including indications for the procedure, patient preparation for the procedure, imaging findings, details of angiography with intervention, if any, and outcome as well as follow-up data were analyzed. RESULTS: In 6 of these 10 cases, bleeding was spontaneous, in 2 cases due to trivial fall and in 2 cases due to post-operative bleeding. Angiography in these patients revealed vascular blush, abnormal hypervascularity or activeextravasation. In all 10 patients, an embolization procedure was performed, with bleeding controlled in 8 patients. There were no procedure-related complications during the procedure, post-procedure bleeding or haematoma at the site of arterial access. One patient had recurrence of bleeding for whom surgical exploration was required, and one patient had significant bleeding intraoperatively which was controlled with high-dose clotting factors, blood transfusion and fresh frozen plasma intraoperatively. CONCLUSION: Endovascular embolization is a safe, effective and cost-saving procedure in arresting bleeding in selected patients with severe haemophilia who are unresponsive to adequate clotting factor replacement and where local vascular causes could be contributing to the bleeding. Pre-operative embolization is also a good procedure to reduce intraoperative blood loss in patients with large pseudotumours. ADVANCES IN KNOWLEDGE: Angiography and embolization in patients with haemophilia is technically challenging and should be performed by highly skilled interventional radiologists, which limits its wider use and familiarity among multidisciplinary teams managing haemophilia. By bringing the knowledge of this effective treatment to the specialist groups who care for patients with haemophilia, its wider application may be possible which can save life and/or reduce morbidity. DOI: 10.1259/bjr.20151064 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5124877  **PMID:**27327402 |
|  | Garge S(1), Keshava SN(2), Moses V(2).  Cannula-Assisted, Transabdominal Ultrasound-Guided Inferior Vena CavaRecanalization in Inferior Vena Cava Occlusion.  Curr Probl Diagn Radiol. 2016 Aug 3. pii: S0363-0188(16)30029-9. doi:10.1067/j.cpradiol.2016.07.003. [Epub ahead of print]  **Author information:** (1)Department of Radiology, Christian Medical College, Vellore, India. Electronic address: drshaileshgarge@gmail.com. (2)Department of Radiology, Christian Medical College, Vellore, India. We describe a novel technique for facilitating recanalization of intrahepatic inferior vena cava (IVC) via the transjugular approach in patients with short segmental hepatic IVC occlusion, where a transjugular liver biopsy cannula provides additional support to the catheter-wire combination and trans-abdominal ultrasound helps in positioning the tip of the cannula at the stump of suprahepatic IVC. Copyright © 2016 Elsevier Inc. All rights reserved.  DOI: 10.1067/j.cpradiol.2016.07.003 | **INTL** | **JUL TO DEC** | **PMID:**27667701 |
|  | George C(1), Lalitha AR(2), Antony A(2), Kumar AV(2), Jacob KS(3).  Antenatal depression in coastal South India: Prevalence and risk factors in thecommunity.  Int J Soc Psychiatry. 2016 Mar;62(2):141-7. doi: 10.1177/0020764015607919. Epub2015 Oct 6.  **Author information:**  (1)Department of Psychiatry, Dr. SMCSI Medical College, Thiruvananthapuram, India mukkath@yahoo.com. (2)Department of Psychiatry, Dr. SMCSI Medical College, Thiruvananthapuram, India. (3)Department of Psychiatry, Christian Medical College, Vellore, India.  BACKGROUND: Antenatal depression is a highly prevalent disorder with serious implications on maternal and child outcomes. There are few studies examining this in low-middle-income community settings. AIMS: To determine the prevalence of antenatal depression in women from a coastal rural background in Kerala and Tamil Nadu and to determine its associated factors. MATERIALS AND METHODS: In this cross-sectional community-based study, in 202 antenatal women, standard interview and diagnostic criteria (Clinical Interview Schedule-Revised (CIS-R)) were employed for identifying depression and examining a wide range of putative clinical and sociocultural risk factors including domestic violence. RESULTS: There was a 16.3% p revalence of depression among the 202 women sampled. The possible risk factors after stepwise backward regression were pressure to have a male child, 11.48 (2.36-55.78); financial difficulties, 8.23 (2.49-27.22); non-arranged marriage, 6.05 (1.72-21.23); history of miscarriage-still birth, 5.77 (1.55-21.43) and marital conflict, 9.55 (2.34-38.98). CONCLUSION: There is a need to develop strategies for recognition and appropriate intervention for antenatal depression, in the context of locally relevant risk factors, so as to improve both maternal and child outcomes. © The Author(s) 2015. DOI: 10.1177/0020764015607919 | **INTL** | **JAN TO JUN** | **PMID:**26443716 |
|  | George L(1), Peter D(1), Chopra M(1), George B(2), Abraham A(2), Mathews V(2),Srivastava A(2), Pulimood SA(1).  Efficacy of narrow band UVB in the treatment of cutaneous GvHD: an Indianexperience.  Bone Marrow Transplant. 2016 Jul;51(7):988-90. doi: 10.1038/bmt.2016.13. Epub2016 Feb 22.  **Author information:** (1)Department of Dermatology, Venereology and Leprosy, Christian Medical College, Vellore, India. (2)Department of Haematology, Christian Medical College, Vellore, India. DOI: 10.1038/bmt.2016.13 | **INTL** | **JUL TO DEC** | **PMID:**26901707 |
|  | George LR(1), Panchanathan I, Cherian NE, Mariappan R.  Pierre Robin Sequence With Full Stomach for Emergency Ventriculoperitoneal Shunt:Anesthetic Challenges.  J Neurosurg Anesthesiol. 2016 Feb 8. [Epub ahead of print]  **Author information:**  (1)Department of Anesthesia, Christian Medical College, Vellore, Tamil Nadu India.  DOI: 10.1097/ANA.0000000000000280 | **INTL** | **JAN TO JUN** | **PMID:**26859548 |
|  | George N(1), Alexander S(2), David VG(1), Basu G(1), Mohapatra A(1), ValsonAT(1), Jacob S(1), Pathak HK(1), Devasia A(3), Tamilarasi V(1), Varughese S(1).  Comparison of Early Mechanical and Infective Complications in First Time Blind,Bedside, Midline Percutaneous Tenckhoff Catheter Insertion with Ultra-ShortBreak-In Period in Diabetics and Non-Diabetics: Setting New Standards.  Perit Dial Int. 2016 11-12;36(6):655-661. Epub 2016 Apr 4.  **Author information:**  (1)Department of Nephrology, Christian Medical College, Vellore, India. (2)Department of Nephrology, Christian Medical College, Vellore, India suceena@gmail.com. (3)Department of Urology, Christian Medical College, Vellore, India.  ♦ BACKGROUND: There are no large studies that have examined ultra-short break-in period with a blind, bedside, midline approach to Tenckhoff catheter insertion. ♦ METHODS: Observational cohort study of 245 consecutive adult patients who underwent percutaneous catheter insertion for chronic peritoneal dialysis (PD) at our center from January 2009 to December 2013. There were 132 (53.9%) diabetics and 113 (46.1%) non-diabetics in the cohort. ♦ RESULTS: The mean break-in period for the percutaneous group was 2.68 ± 2.6 days. There were significantly more males among the diabetics (103 [78%] vs 66 [58.4%], p = 0.001). Diabetics had a significantly higher body mass index (BMI) (23.9 ± 3.7 kg/m(2) vs 22.2 ± 4 kg/m(2), p < 0.001) and lower serum albumin (33.1 ± 6.3 g/L vs 37 ± 6 g/L, p < 0.001) compared with non-diabetics. Poor catheter outflow was present in 6 (4.5%) diabetics and 16 (14.2%) non-diabetics (p = 0.009). Catheter migration was also significantly more common in the non-diabetic group (11 [9.7%] vs 2 [1.5%], p = 0.004). Primary catheter non-function was present in 17(15%) of the non-diabetics and in 7(5.3%) of the diabetics (p = 0.01). There were no mortality or major non-procedural complications during the catheter insertions. Among patients with 1 year of follow-up data, catheter survival (93/102 [91.2%] vs 71/82 [86.6%], p = 0.32) and technique survival (93/102 [91.2%] vs 70/82 [85.4%], p = 0.22) at 1 year was comparable between diabetics and non-diabetics, respectively. ♦ CONCLUSIONS: Percutaneous catheter insertion by practicing nephrologists provides a short break-in period with very low mechanical and infective complications. Non-diabetic status emerged as a significant risk factor for primary catheter non-function presumed to be due to more patients with lower BMI and thus smaller abdominal cavities. This is the first report that systematically compares diabetic and non-diabetic patients. Copyright © 2016 International Society for Peritoneal Dialysis. DOI: 10.3747/pdi.2015.00097 | **INTL** | **JAN TO JUN** | **PMID:**27044797 |
|  | George R(1), Kandasamy R(2).  A Space to Heal.  J Clin Oncol. 2016 Sep 20;34(27):3349-50. doi: 10.1200/JCO.2016.68.6816. Epub2016 Aug 1.  **Author information:** (1)All authors: Christian Medical College, Vellore, India. reena.vellore@gmail.com. (2)All authors: Christian Medical College, Vellore, India.  DOI: 10.1200/JCO.2016.68.6816 | **INTL** | **JUL TO DEC** | **PMID:**27480151 |
|  | George R(1), Santhanam S(2), Samuel R(3), Chapla A(4), Hilmarsen HT(5), BraathenGJ(5), Reinholt FP(6), Jahnsen F(6), Khnykin D(7).  Ichthyosis prematurity syndrome caused by a novel missense mutation in FATP4gene-a case report from India.  Clin Case Rep. 2015 Dec 1;4(1):87-9. doi: 10.1002/ccr3.462. eCollection 2016.  **Author information:** (1)Department of Dermatology Christian Medical College Vellore India. (2)Department of Neonatology Christian Medical College Vellore India. (3)Centre for Stem Cell Research Christian Medical College Vellore India. (4)Department of Endocrinology Christian Medical College Vellore India. (5)Section of Medical Genetics Department of Laboratory Medicine Telemark Hospital Skien Norway. (6)Department of Pathology Oslo- University Hospital- Rikshospitalet Oslo Norway. (7)Department of PathologyOslo- University Hospital- RikshospitaletOsloNorway; Department of DermatologyOslo- University Hospital- RikshospitaletOsloNorway. Ichthyosis prematurity syndrome (IPS) is reported mainly from Scandinavia where most of the cases are homozygous or compound heterozygous for the nonsense mutation c.504C>A (p.Cys168JUL TO DEC) in exon3 indicating a common ancestor for this mutation. The occurrence of IPS in an Indian patient suggests that it is more widespread than previously reported. DOI: 10.1002/ccr3.462 | **INTL** | **JUL TO DEC** | **PMCID: PMC**4706401  **PMID:**26783444 |
|  | George S(1,)(2), Levecke B(2), Kattula D(1), Velusamy V(1), Roy S(1), GeldhofP(2), Sarkar R(1), Kang G(1).  Molecular Identification of Hookworm Isolates in Humans, Dogs and Soil in aTribal Area in Tamil Nadu, India.  PLoS Negl Trop Dis. 2016 Aug 3;10(8):e0004891. doi: 10.1371/journal.pntd.0004891.eCollection 2016.  **Author information:** (1)Department of Gastrointestinal Sciences, Christian Medical College, Vellore, India. (2)Department of Virology, Parasitology and Immunology, Ghent University, Merelbeke, Belgium.  BACKGROUND: Hookworms (Necator americanus and Ancylostoma duodenale) remain a major public health problem worldwide. Infections with hookworms (e.g., A. caninum, A. eylanicum and A. braziliense) are also prevalent in dogs, but the role of dogs as a reservoir for zoonotic hookworm infections in humans needs to be further explored. METHODOLOGY/PRINCIPAL FINDINGS: As part of an open-label community based cluster-randomized trial in a tribal area in Tamil Nadu (India; 2013-2015), a total of 143 isolates of hookworm eggs from human stool were speciated based on a previously described PCR-RFLP methodology. The presence of hookworm DNA was confirmed in 119 of 143 human samples. N. americanus (100%) was the most prevalent species, followed by A. caninum (16.8%) and A. duodenale (8.4%).  Because of the high prevalence of A. caninum in humans, dog samples were also collected to assess the prevalence of A. caninum in dogs. In 68 out of 77 canine stool samples the presence of hookworms was confirmed using PCR-RFLP. In dogs, both A. caninum (76.4%) and A. ceylanicum (27.9%) were identified. Additionally, to determine the contamination of soil with zoonotic hookworm larvae, topsoil was collected from defecating areas. Hookworm DNA was detected in 72 out of 78 soil samples that revealed presence of hookworm-like nematode larvae. In soil, different hookworm species were identified, with animal hookworms being more prevalent (A. ceylanicum: 60.2%, A. caninum: 29.4%, A. duodenale: 16.6%, N. americanus: 1.4%, A. braziliense: .4%). CONCLUSIONS/SIGNIFICANCE: In our study we regularly detected the presence of A. caninum DNA in the stool of humans. Whether this is the result of infection is currently unknown but it does warrant a closer look at dogs as a potential reservoir. DOI: 10.1371/journal.pntd.0004891 | **INTL** | **JUL TO DEC** | **PMCID: PMC**4972381  **PMID:**27486798 |
|  | Ghosh GC(1), Alex AG(2), Jacob JR(3).  Brugada syndrome presenting as incessant polymorphic ventricular tachycardia: arare cause for a common outcome after cardiac arrest in a middle-aged Asian man.  BMJ Case Rep. 2016 May 13;2016. pii: bcr2016215014. doi: 10.1136/bcr-2016-215014.  **Author information:**  (1)Department of Cardiology, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. (2)Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. (3)Department of Electrophysiology, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. DOI: 10.1136/bcr-2016-215014 | **INTL** | **JAN TO JUN** | **PMID:**27177936 |
|  | Ghosh GC(1), Sharma B(2), Gupta BB(2).  CSF ADA Determination in Early Diagnosis of Tuberculous Meningitis inHIV-Infected Patients.  Scientifica (Cairo). 2016;2016:5820823. doi: 10.1155/2016/5820823. Epub 2016 Apr6.  **Author information:**  (1)Hospital Annexe, Christian Medical College, Hospital Campus, Room No. 310, Vellore 632004, India. (2)PGIMER and Dr. RML Hospital, Main Block, New Delhi 100001, India.  Tuberculous and Cryptococcal meningitis are common in HIV patients. A highly specific and sensitive rapid test for diagnosis of Tuberculous meningitis especially in setting of HIV is not available in developing countries where the burden of disease is high. We measured ADA (adenosine deaminase) levels using spectrophotometric method in the CSF of HIV patients with meningitis to differentiate Tuberculous meningitis from meningitis due to other causes. Kruskal-Wallis test was used to compare ADA values between tuberculous meningitis (TBM) and nontuberculous (non-TB) meningitis patients and a receiver-operating characteristic (ROC) analysis curve was drawn from these values. Levels of ADA in the CSF of patients with TBM were significantly higher than those in patients with meningitis due to other causes. CSF ADA level determination with a cut-off value of 6 IU/L was found to be highly specific and fairly sensitive test for the diagnosis of TBM in HIV positive patients. DOI: 10.1155/2016/5820823 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4837278  **PMID:**27144055 |
|  | Girishan S(1), Rajshekhar V(1).  Rapid-onset paraparesis and quadriparesis in patients with intramedullary spinaldermoid cysts: report of 10 cases.  J Neurosurg Pediatr. 2016 Jan;17(1):86-93. doi: 10.3171/2015.5.PEDS1537. Epub2015 Oct 2.  **Author information:**  (1)Department of Neurological Sciences, Christian Medical College, Vellore, India.  OBJECT Intramedullary dermoid cysts are rare tumors of the spinal cord. Presentation with rapid onset of paraparesis or quadriparesis (onset within 2 weeks) is rarer still. The authors present their experience in the management and outcome of patients with such a presentation. METHODS Patient records between 2000 and 2014 were retrospectively reviewed to identify those with intraspinal dermoid cysts who presented with rapid-onset paraparesis or quadriparesis. Their clinical, radiological, operative, and follow-up data were analyzed. RESULTS Of a total of 50 patients with intraspinal dermoid cysts managed during the study period, 10 (20%) presented with rapid-onset paraparesis or quadriparesis; 9 patients ranged in age from 8 months to 2 years, and 1 patient was 25 years old. A dermal sinus was seen in the lumbar region of 4 patients, the sacral region of 3, and the thoracic region of 1, and in 1 patient no sinus was found. All except 1 patient presented with rapid-onset paraparesis secondary to infection of the intramedullary dermoid cyst. One patient presented with rupture of a dermoid cyst with extension into the central canal up to the medulla. Early surgery was done soon after presentation in all except 2 patients. Among the 9 patients who underwent surgery (1 patient did not undergo surgery), total excision of the intramedullary dermoid cyst was done in 3 patients, near-total excision in 4 patients, and partial excision in 2 patients. Of the 9 patients who underwent surgery, 8 showed significant improvement in their neurological status, and 1 patient remained stable. The 1 patient who did not undergo surgery died as a result of an uncontrolled infection after being discharged to a local facility for management of wound infection. CONCLUSIONS Early recognition of a dermal sinus and the associated intraspinal dermoid cyst and timely surgical intervention can eliminate the chances of acute deterioration of neurological function. Even after an acute onset of paraparesis or quadriparesis, appropriate antibiotic therapy and prompt surgery can provide reasonably good outcomes in these patients. DOI: 10.3171/2015.5.PEDS1537 | **INTL** | **JAN TO JUN** | **PMID:**26431244 |
|  | Godson HF(1,)(2), Manickam R(3), Saminathan S(1), Ganesh KM(1), PonmalarR(1,)(2).  The effect of influence quantities and detector orientation on small-fieldpatient-specific IMRT QA: comparison of measurements with various ionizationchambers.  Radiol Phys Technol. 2016 Dec 1. [Epub ahead of print]  **Author information:** (1)Department of Radiation Physics, Kidwai Memorial Institute of Oncology, Dr. M.H. Marigowda Road, Bangalore, 560 029, India. (2)Department of Radiotherapy, Christian Medical College, Vellore, India. (3)Department of Radiation Physics, Kidwai Memorial Institute of Oncology, Dr. M.H. Marigowda Road, Bangalore, 560 029, India. [drmravi59@yahoo.com](mailto:drmravi59@yahoo.com).  Intensity-modulated radiation therapy (IMRT) requires a patient-specific quality assurance (QA) program to validate the treatment plan and a high level of dosimetric accuracy in the treatment delivery. Dosimetric verification generally consists of both absolute- and relative-dose measurements in a phantom using ionization chambers. Measurements were carried out with three different ionization chambers (Scanditronix FC 65G, Exradin A18, and PTW PinPoint 31014) to assess the effects of influence quantities such as the stability, pre- and post-irradiation leakage, stem effect, polarity, and ion recombination on the IMRT point-dose verification with two different orientations. The Exradin A18 and PTW PinPoint ion chambers demonstrated noticeable leakage to magnitudes of 0.6 and 1.2%, whereas negligible leakage was observed with FC 65G ion chamber. Maximum deviations of 0.5 and 0.6% were noticed for the smallest field owing to the ion recombination effect with the PTW PinPoint ion chamber in the parallel and perpendicular orientations, respectively. The calculated total uncertainties of all influence quantities for the FC 65G, A18, and PTW PinPoint ion chambers were 0.5, 0.7, and 1.3%, respectively. The uncertainties determined for each chamber were incorporated into the point-dose measurements of 30 head and neck patient-specific QA plans, and the variation was found to be within ±3%. The magnitude of the leakage in a small-volume ion chamber indicated the significance of incorporating the correction factors in the absolute-dose measurement. A paired t test analysis indicated that the influence quantities significantly affect the point-dose measurements in the patient-specific IMRT QA. DOI: 10.1007/s12194-016-0385-y | **INTL** | **JUL TO DEC** | **PMID:**27910001 |
|  | Gouse M(1), Albert S, Inja DB, Nithyananth M.  Incidence and predictors of radial nerve palsy with the anterolateral brachialissplitting approach to the humeral shaft.  Chin J Traumatol. 2016 Aug 1;19(4):217-20.  **Author information:** (1)Department of Orthopaedics Unit 1, Christian Medical College, Vellore 632004, Tamil Nadu, India.  PURPOSE: Fractures of the humeral shaft are common and account for 3%-5% of all orthopedic injuries. This study aims to estimate the incidence of radial nerve palsy and its outcome when the anterior approach is employed and to analyze the predictive factors. METHODS: The study was performed in the department of orthopaedics unit of a tertiary care trauma referral center. Patients who underwent surgery for acute fractures and nonunions of humerus shaft through an anterior approach from January 2007 to December 2012 were included. We retrospectively analyzed medical records, including radiographs and discharge summaries, demographic data, surgical procedures prior to our index surgery, AO fracture type and level of fracture or nonunion, experience of the operating surgeon, time of the day when surgery was performed, and radial nerve palsy with its recovery condition. The level of humerus shaft fracture or nonunion was divided into upper third, middle third and lower third. Irrespective of prior surgeries done elsewhere, the first surgery done in our institute through an anterior approach was considered as the index surgery and subsequent surgical exposures were considered as secondary procedures.  RESULTS: Of 85 patients included, 19 had preoperative radial nerve palsy. Eleven (16%) patients developed radial nerve palsy after our index procedure. Surgeons who have two or less than two years of surgical experience were 9.2 times morelikely to induce radial nerve palsy (p=0.002). Patients who had surgery between 8 p.m. and 8 a.m. were about 8 times more likely to have palsy (p=0.004). The rest risk factor is AO type A fractures, whose incidence of radial nerve palsy was 1.3 times as compared with type B fractures (p =0.338). For all the 11 patients, one was lost to follow-up and the others recovered within 6 months. CONCLUSION: Contrary to our expectations, secondary procedures and prior multiple surgeries with failed implants and poor soft tissue were not predictive factors of postoperative deficit. From our study, we also conclude that radial nerve recovery can be reasonably expected in all patients with a postoperative palsy following he anterolateral approach. | **INTL** | **JUL TO DEC** | **PMCID: PMC**4992102  **PMID:**27578378 |
|  | Grassly NC(1), Praharaj I(2), Babji S(2), Kaliappan SP(2), Giri S(2), VenugopalS(2), Parker EP(3), Abraham A(2), Muliyil J(2), Doss S(2), Raman U(2), Liu J(4),Peter JV(2), Paranjape M(2), Jeyapaul S(2), Balakumar S(2), Ravikumar J(2),Srinivasan R(2), Bahl S(5), Iturriza-Gómara M(6), Uhlig HH(7), Houpt ER(4), JohnJ(2), Kang G(2).  The effect of azithromycin on the immunogenicity of oral poliovirus vaccine: adouble-blind randomised placebo-controlled trial in seronegative Indian infants.  Lancet Infect Dis. 2016 Aug;16(8):905-14. doi: 10.1016/S1473-3099(16)30023-8.Epub 2016 May 4.  **Author information:** (1)Department of Infectious Disease Epidemiology, Imperial College London, London, UK; Christian Medical College, Vellore, Tamil Nadu, India. Electronic address: n.grassly@imperial.ac.uk. (2)Christian Medical College, Vellore, Tamil Nadu, India. (3)Department of Infectious Disease Epidemiology, Imperial College London, London, UK. (4)Division of Infectious Diseases and International Health, University of Virginia School of Medicine, Charlottesville, VA, USA. (5)WHO Regional Office for South-East Asia, New Delhi, India. (6)Institute of Infection and Global Health, and NIHR Health Protection Research Unit in Gastrointestinal Infection, University of Liverpool, Liverpool, UK. (7)Translational Gastroenterology Unit, Nuffield Department of Medicine, and Department of Paediatrics, University of Oxford, Oxford, UK.  BACKGROUND: Oral poliovirus vaccine is less immunogenic and effective in low-income countries than in high-income countries, similarly to other oral vaccines. The high prevalence of intestinal pathogens and associated environmental enteropathy has been proposed to explain this problem. Because administration of an antibiotic has the potential to resolve environmental enteropathy and clear bacterial pathogens, we aimed to assess whether antibiotics would improve oral poliovirus vaccine immunogenicity. METHODS: We did a double-blind, randomised, placebo-controlled trial of the effect of azithromycin on the immunogenicity of serotype-3 monovalent oral poliovirus vaccine given to healthy infants living in 14 blocks of Vellore district, India. Infants were eligible to participate if they were 6-11 months old, available for the study duration, and lacked serum neutralising antibodies to serotype-3 poliovirus. Infants were randomly assigned (1:1) at enrolment to receive oral 10 mg/kg azithromycin or placebo once daily for 3 days, followed by serotype-3 monovalent oral poliovirus vaccine on day 14. The primary outcome was detection of serum neutralising antibodies to serotype-3 poliovirus at a dilution of one in eight or more on day 35 and was assessed in the per-protocol population (ie, all those who received azithromycin or placebo, oral poliovirus vaccine, and provided a blood sample according to the study protocol). Safety outcomes were assessed in all infants enrolled in the study. The trial is registered with the Clinical Trials Registry India, number CTRI/2014/05/004588. FINDINGS: Between Aug 5, 2014, and March 21, 2015, 754 infants were randomly assigned: 376 to receive azithromycin and 378 to placebo. Of these, 348 (93%) of 376 in the azithromycin group and 357 (94%) of 378 infants in the placebo group completed the study per protocol. In the azithromycin group, 175 (50%) seroconverted to serotype-3 poliovirus compared with 192 (54%) in the placebo group (risk ratio 0·94, 95% CI 0·81-1·08; p=0·366). Azithromycin reduced faecal biomarkers of environmental enteropathy (calprotectin, myeloperoxidase, α1-antitrypsin) and the prevalence of bacterial but not viral or eukaryotic pathogens. Viral pathogens were associated with lower seroconversion. Three serious adverse events were reported (two in the azithromycin group and one in the placebo group), but none was considered related to the study interventions. INTERPRETATION: Azithromycin did not improve the immunogenicity of oral poliovirus vaccine despite reducing biomarkers of environmental enteropathy and the prevalence of pathogenic intestinal bacteria. Viral interference and innate antiviral immune mechanisms might be more important determinants of the immunogenicity of live-virus oral vaccines. FUNDING: Bill & Melinda Gates Foundation. Copyright © 2016 Elsevier Ltd. All rights reserved. DOI: 10.1016/S1473-3099(16)30023-8 | **INTL** | **JUL TO DEC** | **PMID:**27156189 |
|  | Guerra M(1), Prina AM(2), Ferri CP(3), Acosta D(4), Gallardo S(5), Huang Y(6),Jacob KS(7), Jimenez-Velazquez IZ(8), Llibre Rodriguez JJ(9), Liu Z(6), SalasA(10), Sosa AL(11), Williams JD(12), Uwakwe R(13), Prince M(2).  A comparative cross-cultural study of the prevalence of late life depression inlow and middle income countries.  J Affect Disord. 2016 Jan 15;190:362-8. doi: 10.1016/j.jad.2015.09.004. Epub 2015Oct 23.  **Author information:**  (1)Institute of Memory, Depression and Disease Risk, Avda Constructores 1230, Lima 12, Peru; Centre for Global Mental Health, Health Service and Population Research Department, Institute of Psychiatry, Psychology and Neuroscience, King׳s College London, London, UK; Peruvian University, Cayetano, Heredia, Lima, Peru. Electronic address: mariella.guerra.1066@gmail.com. (2)Centre for Global Mental Health, Health Service and Population Research Department, Institute of Psychiatry, Psychology and Neuroscience, King׳s College London, London, UK. (3)Federal University of Sao Paulo, UNIFESP, Sao Paulo, Brasil. (4)National University Pedro Henriquez Urena. (5)Institute of Memory, Depression and Disease Risk, Avda Constructores 1230, Lima 12, Peru. (6)Peking University China. (7)Christian Medical College, Vellore, India. (8)School of Medicine, University of Puerto Rico, San Juan, Puerto Rico. (9)Medical University of Havana. (10)Central University of Venezuela, Caracas, Venezuela. (11)National Autonomous University of Mexico. (12)Department of Community Health, Voluntary Health Services, Chennai, India. (13)Nnamdi Azikiwe Uniiversity.  BACKGROUND: Current estimates of the prevalence of depression in later life mostly arise from studies carried out in Europe, North America and Asia. In this study we aimed to measure the prevalence of depression using a standardized method in a number of low and middle income countries (LMIC). METHODS: A one-phase cross-sectional survey involving over 17,000 participants aged 65 years and over living in urban and rural catchment areas in 13 sites from 9 countries (Cuba, Dominican Republic, Puerto Rico, Mexico, Venezuela, Peru, China, India and Nigeria). Depression was assessed and compared using ICD-10 and EURO-D criteria. RESULTS: Depression prevalence varied across sites according to diagnostic criteria. The lowest prevalence was observed for ICD-10 depressive episode (0.3 to 13.8%). When using the EURO-D depression scale, the prevalence was higher and ranged from 1.0% to 38.6%. The crude prevalence was particularly high in the Dominican Republic and in rural India. ICD-10 depression was also associated with increased age and being female. LIMITATIONS: Generalisability of findings outside of catchment areas is difficult to assess. CONCLUSIONS: Late life depression is burdensome, and common in LMIC. However its prevalence varies from culture to culture; its diagnosis poses a significant challenge and requires proper recognition of its expression. Copyright © 2015 The Authors. Published by Elsevier B.V. All rights reserved. DOI: 10.1016/j.jad.2015.09.004 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4679114  **PMID:**26544620 |
|  | Gupta M(1), Gnanasekaran KK, Manojkumar R, Thomas A, Sebastian A.  Extrauterine Placental Site Trophoblastic Tumor Involving the Vagina.  Int J Gynecol Pathol. 2016 Aug 10. [Epub ahead of print]  **Author information:** (1)Departments of General Pathology (M.G., K.K.G., R.M.) Radiology Gynecologic Oncology (A.T., A.S.), Christian Medical College, Vellore, Tamil Nadu, India.  Very few cases of placental site trophoblastic tumor (PSTT) primarily involving the extrauterine sites have been reported to date. We report a case of a 29-year-old female who presented with a vaginal nodule 9 months after delivery at an outside hospital which was initially diagnosed as a poorly differentiated squamous cell carcinoma. Subsequently she was referred to our institute and on the basis of histology, mildly elevated serum β-HCG level, and immunohistochemistry, PSTT was diagnosed. After the completion of chemotherapy, the vaginal nodule completely regressed and serum β-hCG returned to the baseline. Her follow-up has been unremarkable. This case highlights the importance of the fact that PSTT can be easily misdiagnosed at extrauterine sites in the absence of proper clinical, histologic, and immunohistochemical correlation. DOI: 10.1097/PGP.0000000000000318 | **INTL** | **JUL TO DEC** | **PMID:**27513078 |
|  | Gupta M(1).  Malignant melanoma of cervix.  BMJ Case Rep. 2016 Nov 28;2016. pii: bcr2016217970. doi: 10.1136/bcr-2016-217970.  **Author information:** (1)Department of General Pathology, Christian Medical College, Vellore, Tamil Nadu, India.  A 68-year-old woman presented with symptoms of bleeding per vaginum. On examination, a growth was seen in the cervix, clinically considered to be squamous cell carcinoma. The growth was confined to the cervix and did not involve the parametria. However, on biopsy it was diagnosed as malignant melanoma. She underwent surgery elsewhere and was advised chemotherapy as these tumours are aggressive; however, she refused chemotherapy. She has been on regular follow-up and has an ongoing survival and disease-free period of more than 5 years. Primary cervical malignant melanomas are very rare as compared with vulval and vaginal counterparts and should be considered in the histological differential diagnosis of poorly differentiated malignant neoplasms involving cervix. Moreover, it is important to rule out metastasis from common primary sites such as skin, oesophagus, uveal tract and anorectal region before considering diagnosis of primary cervical melanoma. 2016 BMJ Publishing Group Ltd. DOI: 10.1136/bcr-2016-217970 | **INTL** | **JUL TO DEC** | **PMID:**27895081 |
|  | Gupta N(1), Gupta N(2), Chhabra P(3).  Image Diagnosis: Dental and Skeletal Fluorosis.  Perm J. 2016 Winter;20(1):e105-6. doi: 10.7812/TPP/15-048.  **Author information:** (1)Student in the Department of Endodontics at PDM Dental College and Research Institute in Bahadurgarh, India. nishtha.gupta9009@gmail.com. (2)Fellow in the Clinical Immunology & Rheumatology Department at Christian Medical College in Vellore, India. nik.gupta4u@gmail.com. (3)Senior Resident in the Department of Gastroenterology at the Postgraduate Institute of Medical Education and Research in Chandigarh, India. [puneet.pgi@gmail.com](mailto:puneet.pgi@gmail.com). DOI: 10.7812/TPP/15-048 | **INTL** | **JUL TO DEC** | **PMCID: PMC**4732806  **PMID:**26824971 |
|  | Gupta PK(1), Krishna M(2), Chullikana A(3), Desai S(4), Murugesan R(5), DuttaS(6), Sarkar U(7), Raju R(8), Dhar A(9), Parakh R(10), Jeyaseelan L(11),Viswanathan P(3), Vellotare PK(3), Seetharam RN(3), Thej C(12), Rengasamy M(3),Balasubramanian S(3), Majumdar AS(3).  Administration of Adult Human Bone Marrow-Derived, Cultured, Pooled, AllogeneicMesenchymal Stromal Cells in Critical Limb Ischemia Due to Buerger's Disease:Phase II Study Report Suggests Clinical Efficacy.  Stem Cells Transl Med. 2016 Oct 5. pii: sctm.2016-0237. [Epub ahead of print]  **Author information:** (1)Stempeutics Research, Bangalore, India [pawan.gupta@stempeutics.com](mailto:pawan.gupta@stempeutics.com). (2)Department of Vascular Surgery, Sri Jayadeva Institute of Cardiovascular Sciences, Bangalore, India. (3)Stempeutics Research, Bangalore, India. (4)Department of Vascular Surgery, MS Ramaiah Medical College &Hospitals, Bangalore, India. (5)Department of Vascular Surgery, SRM Medical College, Chennai, India. (6)Department of Cardiovascular Surgery, Nightingale Hospital, Kolkata, India. (7)Department of Cardiovascular Surgery, Health Point Hospital, Kolkata, India. (8)Department of Vascular Surgery, Sri Ramachandra Medical College, Chennai, India. (9)Department of Surgical Disciplines, All India Institute of Medical Sciences, New Delhi, India. (10)Division of Peripheral Vascular and Endovascular Sciences, Medanta-The Medicity, Gurgaon, Haryana, India. (11)Department of Biostatistics, Christian Medical College, Vellore, India. (12)Stempeutics Research, Bangalore, India Manipal University, Manipal, India. :  Critical limb ischemia (CLI) due to Buerger's disease is a major unmet medical need with a high incidence of morbidity. This phase II, prospective, nonrandomized, open-label, multicentric, dose-ranging study was conducted toassess the efficacy and safety of i.m. injection of adult human bone marrow-derived, cultured, pooled, allogeneic mesenchymal stromal cells (BMMSC) in CLI due to Buerger's disease. Patients were allocated to three groups: 1 and 2 million cells/kg body weight (36 patients each) and standard of care (SOC) (18 patients). BMMSCs were administered as 40-60 injections in the calf muscle and locally, around the ulcer. Most patients were young (age range, 38-42 years) and ex-smokers, and all patients had at least one ulcer. Both the primary endpoints-reduction in rest pain (0.3 units per month [SE, 0.13]) and healing of ulcers (11% decrease in size per month [SE, 0.05])-were significantly better in the group receiving 2 million cells/kg body weight than in the SOC arm. Improvement in secondary endpoints, such as ankle brachial pressure index (0.03 [SE, 0.01] unit increase per month) and total walking distance (1.03 [SE, 0.02] times higher per month), were also significant in the group receiving 2 million cells/kg as compared with the SOC arm. Adverse events reported were remotely related or unrelated to BMMSCs. In conclusion, i.m. administration of BMMSC at a dose of 2 million cells/kg showed clinical benefit and may be the best regimen in patients with CLI due to Buerger's disease. However, further randomized controlled trials are required to confirm the most appropriate dose.SIGNIFICANCE: Critical limb ischemia (CLI) due to Buerger's disease presents a major unmet medical need. The limited therapeutic options lead to increased morbidity and mortality. This study showed that use of adult human bone marrow-derived, cultured, pooled, allogeneic mesenchymal stromal cells is safe and efficacious when the ells are injected intramuscularly at a dose of 2 million cells/kg body weight in patients with CLI. Rest pain and ulcer healing significantly improved in most patients. This regimen may be a novel therapeutic option for Buerger's disease. ©AlphaMed Press. DOI: 10.5966/sctm.2016-0237 | **INTL** | **JUL TO DEC** | **PMID:**27708131 |
|  | Gupta S(1), Gupta N(2).  Sjögren Syndrome and Pregnancy: A Literature Review.  Perm J. 2016;21. doi: 10.7812/TPP/16-047. Epub 2016 Nov 9.  **Author information:**  (1)Medical Officer in the Department of Obstetrics and Gynecology at the Vardhman Mahavir Medical College and Safdarjung Hospital in Delhi, New Delhi, India. drsuruchi87@gmail.com. (2)Fellow in Clinical Immunology & Rheumatology at the Christian Medical College in Vellore, India. [nik.gupta4u@gmail.com](mailto:nik.gupta4u@gmail.com).  OBJECTIVES: Autoimmune diseases do not impair fertility, and women with autoimmune diseases who become pregnant are likely to experience more complicated pregnancies than are women without the disease. Pregnancies complicated by these disorders have a high clinical impact on both the pregnancy and the disease. The effect of autoimmune disease on pregnancy differs according to the type of maternal disease, disease activity, severity of organ damage, antibody profile, and drug treatment. Sjögren syndrome is an autoimmune disease with a high prevalence of anti-SS-A (anti-Ro) and anti-SS-B (anti-La) antibodies. Anti-SS-A antibodies are associated with congenital heart block. Data on pregnancy outcomes in primary Sjögren syndrome are scarce. METHODS: We performed a review of the literature regarding pregnancy outcomes in women with Sjögren syndrome. RESULTS: Women with Sjögren syndrome are likely to experience more complications during pregnancy than women without an autoimmune disease. Studies show a high incidence of poor fetal outcomes for these patients. CONCLUSION: Women with Sjögren syndrome require prenatal counseling explaining the risks involved and the need to control the disease well before conception. High-risk pregnancies can be optimally managed by a multidisciplinary team. DOI: 10.7812/TPP/16-047 | **INT** | **JUL TO DEC** | PMID: 28080954  PMCID: PMC5267941 |
|  | Gururani K(1), Kumar P(2).  Unusual presentation of left atrial myxoma.  BMJ Case Rep. 2016 Sep 1;2016. pii: bcr2016217089. doi: 10.1136/bcr-2016-217089.  **Author information:** (1)Department of Cardiology, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. (2)Department of Cardiology, Eternal Heart are Centre, Jaipur, Rajasthan, India. DOI: 10.1136/bcr-2016-217089 | **INTL** | **JUL TO DEC** | **PMID:**27587750 |
|  | Haanshuus CG(1), Chandy S(2), Manoharan A(2), Vivek R(2), Mathai D(2), Xena D(2),Singh A(3), Langeland N(1,)(4), Blomberg B(1,)(4), Vasanthan G(2), Sitaram U(2),Appasamy J(5), Nesaraj J(6), Henry A(7), Patil S(8), Alvarez-Uria G(9), ArmstrongL(10), Mørch K(1).  A High Malaria Prevalence Identified by PCR among Patients with AcuteUndifferentiated Fever in India.  PLoS One. 2016 Jul 7;11(7):e0158816. doi: 10.1371/journal.pone.0158816.eCollection 2016.  **Author information:** (1)National Centre for Tropical Infectious Diseases, Department of edicine, Haukeland University Hospital, Bergen, Norway. (2)Infectious Diseases Training and Research Center, Department of Medicine Unit-1 and Infectious Diseases, Christian edical College, Vellore, India. (3)Baptist Christian Hospital, Tezpur, Assam, India. 4)Department of Clinical Science, University of Bergen, Bergen, Norway. (5)Christian ellowship Hospital, Oddanchatram, Tamil Nadu, India. (6)Bethesda Hospital, Ambur, Tamil Nadu, India. (7)Christian Hospital, Mungeli, Chhattisgarh, India. (8)B.K.L. Walawalkar Hospital, Ratnagiri, Maharashtra, India. (9)Rural Development Trust Hospital, Anantapur, Andhra Pradesh, India. (10)Duncan Hospital, Raxaul, Bihar, India.  BACKGROUND: Approximately one million malaria cases were reported in India in 2015, based on microscopy. This study aims to assess the malaria prevalence amonghospitalised fever patients in India identified by PCR, and to evaluate the performance of routine diagnostic methods. METHODS: During June 2011-December 2012, patients admitted with acute undifferentiated fever to seven secondary level community hospitals in Assam (Tezpur), Bihar (Raxaul), Chhattisgarh (Mungeli), Maharashtra (Ratnagiri), Andhra Pradesh (Anantapur) and Tamil Nadu (Oddanchatram and Ambur) were included. The malaria prevalence was assessed by polymerase chain reaction (PCR), routine microscopy, and a rapid diagnostic test (RDT) with PCR as a reference method. RESULTS: The malaria prevalence by PCR was 19% (268/1412) ranging from 6% (Oddanchatram, South India) to 35% (Ratnagiri, West India). Among malaria positive patients P. falciparum single infection was detected in 46%, while 38% had P. vivax, 11% mixed infections with P. falciparum and P. vivax, and 5% P. malariae. Compared to PCR, microscopy had sensitivity of 29% and specificity of 98%, while the RDT had sensitivity of 24% and specificity of 99%. CONCLUSIONS: High malaria prevalence was identified by PCR in this cohort. Routine diagnostic methods had low sensitivity compared to PCR. The results suggest that malaria is underdiagnosed in rural India. However, low parasitaemia controlled by immunity may constitute a proportion of PCR positive cases, which calls for awareness of the fact that other pathogens could be responsible for the febrile disease in submicroscopic malaria. DOI: 10.1371/journal.pone.0158816 | **INTL** | **JUL TO DEC** | **PMCID: PMC**4936667  **PMID:**27389396 |
|  | Hareendran S, Ramakrishna B, Jayandharan GR. **.**   Synergistic inhibition of PARP-1 and NF-?B signaling downregulates immune response against recombinant AAV2 vectors during hepatic gene therapy.  **Eur J Immunol. 2016 Jan;46(1):154-66**  **Author information:**  (1)Centre for Stem Cell Research, Christian Medical College, Vellore, Tamil Nadu, India. (2)Department of General Pathology, Christian Medical College, Vellore, Tamil Nadu, India. (3)Department of Hematology, Christian Medical College, Vellore, Tamil Nadu, India. (4)Department of Biological Sciences and Bioengineering, Indian Institute of Technology, Kanpur, Uttar Pradesh, India.  Host immune response remains a key obstacle to widespread application of adeno-associated virus (AAV) based gene therapy. Thus, targeted inhibition of the signaling pathways that trigger such immune responses will be beneficial. Previous studies have reported that DNA damage response proteins such as poly(ADP-ribose) polymerase-1 (PARP-1) negatively affect the integration of AAV in the host genome. However, the role of PARP-1 in regulating AAV transduction and the immune response against these vectors has not been elucidated. In this study, we demonstrate that repression of PARP-1 improves the transduction of single-stranded AAV vectors both in vitro (∼174%) and in vivo (two- to 3.4-fold). Inhibition of PARP-1, also significantly downregulated the expression of several proinflammatory and cytokine markers such as TLRs, ILs, NF-κB subunit proteins associated with the host innate response against self-complementary AAV2 vectors. The suppression of the inflammatory response targeted against these vectors was more effective upon combined inhibition of PARP-1 and NF-κB signaling. This strategy also effectively attenuated the AAV capsid-specific cytotoxic T-cell response, with minimal effect on vector transduction, as demonstrated in normal C57BL/6 and hemophilia B mice. These data suggest that targeting specific host cellular proteins could be useful to attenuate the immune barriers to AAV-mediated gene therapy. © 2015 WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim. DOI: 10.1002/eji.201545867 | **INT** | **JAN TO JUN** | **PMID:** 26443873 |
|  | Hazra D(1), Sen I(1), Selvaraj D(1), Premkumar P(1), Agarwal S(1).  Arterial thoracic outlet syndrome in Klippel-Feil syndrome.  ANZ J Surg. 2016 Feb 22. doi: 10.1111/ans.13452. [Epub ahead of print]  **Author information:**  (1)Department of Vascular Surgery, Christian Medical College, Vellore, India.  DOI: 10.1111/ans.13452 | **INTL** | **JAN TO JUN** | **PMID:**26909867 |
|  | Herle K(1), Jehangir S(1).  Retained Wireless Capsule Endoscope in a Girl with suspected Crohn's Disease.  APSP J Case Rep. 2016 Sep 1;7(4):27. doi: 10.21699/ajcr.v7i4.466.  **Author information:** (1)Department of Pediatric Surgery, Christian Medical College, Vellore, Tamil Nadu, INDIA.  Wireless capsule endoscopy (WCE) is one of the great milestones in the field of gastroenterology. It is versatile in image acquisition, painless and can reach parts of the small bowel not amenable to conventional endoscopy. The commonest complication with WCE is retention of the capsule. We report a case of retained capsule in a child who was being investigated for obscure gastrointestinal bleeding (OGIB). Operative intervention was required for its retrieval after two weeks of expectant management. DOI: 10.21699/ajcr.v7i4.466 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5027058  **PMID:**27672577 |
|  | Hernandez AL(1), Karthik R, Sivasubramanian M, Raghavendran A, Gnanamony M,Lensing S, Lee JY, Kannangai R, Abraham P, Mathai D, Palefsky JM.  Prevalence of Anal HPV Infection Among HIV-Positive Men Who Have Sex With Men inIndia.  J Acquir Immune Defic Syndr. 2016 Apr 1;71(4):437-43. doi:10.1097/QAI.0000000000000855.  **Author information:** (1)JUL TO DECDepartment of Medicine, University of California, San Francisco, CA; †Schoolof Public Health, Department of Epidemiology, University of California, Berkeley, CA; ‡Department of Medicine, Christian Medical College, Vellore, India; §The  Humsafar Trust, Mumbai, India; ‖Department of Clinical Virology, Christian Medical College, Vellore, India; ¶Department of Cancer Biology and Pharmacology, University of Illinois, Chicago, IL; #Department of Biostatistics, University of Arkansas for Medical Sciences, Little Rock, Arkansas; and JUL TO DECJUL TO DECApollo Institute of Medical Sciences and Research, Hyderabad, India. BACKGROUND: India has a large population of HIV-positive individuals, including men who have sex with men (MSM), and the incidence of human papillomavirus (HPV)-related cancers is high. In developed countries, HIV-positive MSM exhibit the highest prevalence of anal HPV infection and incidence of anal cancer. Little is known about anal HPV infection in HIV-positive Indian MSM. METHODS: We evaluated 300 HIV-positive MSM from 2 cities in India. Men were tested for anal HPV infection using L1-HPV DNA polymerase chain reaction with probes specific for 29 types and a mixture of 10 additional types. CD4 level and plasma HIV viral load were measured. Participants completed an interviewer-administered questionnaire including a sexual history. RESULTS: The prevalence of anal HPV was 95% (95% confidence interval: 91% to 97%). The 3 most common types were HPV 35 (20%), HPV 16 (13%), and HPV 6/11 (13%). istory of taking antiretroviral medications decreased risk of anal HPV 16 infection [relative risk (RR): 0.6 (0.4-1.0)]. Having an increased number of vaginal sex partners lowered risk of any anal HPV infection. Ever having receptive sex increased risk of any anal HPV [RR: 1.2 (1.1-1.4)] and anal HPV 16 [RR: 6.5 (1.8-107)].CONCLUSIONS: Almost all Indian HIV-positive MSM had anal HPV infection. The prevalence of HPV 16 was lower and the prevalence of other oncogenic HPV types was higher than in similar populations in North America and Europe. Vaccine-based prevention strategies for HPV infection in India should consider potential differences in HPV type distribution among HIV-infected MSM when designing interventions. DOI: 10.1097/QAI.0000000000000855 | **INTL** | **JUL TO DEC** | **PMCID: PMC**4939069  **PMID:**26379067 |
|  | Iqbal F(1), Kujan O, Bowley DM, Keighley MR, Vaizey CJ.  Quality of Life After Ostomy Surgery in Muslim Patients: A Systematic Review ofthe Literature and Suggestions for Clinical Practice.  J Wound Ostomy Continence Nurs. 2016 Jul-Aug;43(4):385-91. doi:10.1097/WON.0000000000000235.  **Author information:** (1)Fareed Iqbal, MBChB, BMedSc (Hons), MRCS (Eng), Sir Alan Parks PhysiologyUnit, St Marks Hospital, Harrow London, United Kingdom. Omar Kujan, PhD, DDS, MSc, Department of Oral Medicine and Diagnostic Sciences, College of Dentistry, Al-Farabi College, Riyadh, Saudi Arabia. Douglas M. Bowley, MBBS, FRCS, Department of Surgery, Heart of England NHS Foundation Trust, Birmingham, United Kingdom. Michael R. B. Keighley, MS, MBBS, FRCS, CMC Vellore, India; and Theology, Spirituality and Health, Department of Theology and Religion, University of Durham, Durham, United Kingdom. Carolynne J. Vaizey, MD, MBChB, FRCS, FCS (SA), Sir Alan Parks Physiology Unit, St Marks Hospital, Harrow, London, United Kingdom. PURPOSE: To determine factors that influence health-related quality of life(HRQOL) after ostomy surgery in Muslim patients. METHODS: A systematic literature review of published data was carried out using MeSH terms ("Muslim" OR "Islam") AND ("stoma" OR "ostomy" OR "colostomy" OR "ileostomy") AND "quality of life" AND "outcomes." RESULTS: Twelve studies enrolling 913 subjects were deemed suitable for inclusion in the review. HRQOL was found to be particularly impaired in Muslims; this impairment went beyond that experienced by non-Muslim patients. Factors associated with this difference included psychological factors, social isolation, underreporting of complications, and sexual dysfunction leading to breakdown of marital relations as well as diminished religious practices.  CONCLUSION: Muslims requiring ostomies should receive preoperative counseling by surgeons and ostomy nurses. These discussions should also include faith leaders and/or hospital chaplains. Ongoing support after surgery can be extended into the community and encompass family doctors and faith leaders. Additional research exploring HRQOL after surgery in Muslims living in Western societies is indicated. DOI: 10.1097/WON.0000000000000235 | **INTL** | **JUL TO DEC** | **PMID:**27196687 |
|  | Isaac R(1), Paul B(2), Geethanajali FS(3), Kang G(4), Wanke C(5).  Role of intestinal dysfunction in the nutritional compromise seen in humanimmunodeficiency virus-infected adults in rural India.  Trop Doct. 2017 Jan;47(1):44-48. Epub 2016 Jan 24.  **Author information:**  (1)Associate Professor, RUHSA Department, Christian Medical College, Vellore, Tamil Nadu, India rita.isaac@cmcvellore.ac.in. (2)Associate Professor, RUHSA Department, Christian Medical College, Vellore, Tamil Nadu, India. (3)Professor, Department of Clinical Biochemistry, Christian Medical College, Vellore, Tamil Nadu, India. (4)Professor, Department of Gastrointestinal Sciences, Christian Medical College, Vellore, Tamil Nadu, India. (5)Professor, Department of Public Health and Community Medicine, Tufts University School of Medicine, Boston, Massachusetts, USA.  Human immunodeficiency virus (HIV) disease progression is often marked by significant weight loss with or without chronic diarrhoea. We studied the extent of intestinal dysfunction using a D-xylose absorption test and association with nutritional compromise as measured by body mass index (BMI) and serum antioxidants levels in HIV-infected individuals through a cross-sectional survey of 45 ART naïve, HIV-positive and 45, age-socioeconomic status matched negative controls in a rural population in India. More than 40% of HIV-positive and HIV-negative participants had intestinal dysfunction (42.2% vs. 44.4%). However an increasing gradient of low D-xylose absorption was noted with decreasing CD4 counts (32%, 50% and 58.3% among those with >350, 200-350 and <200 cells/mm(3), respectively). Multivariate analysis revealed a significant association between intestinal dysfunction and low BMI (P = 0.03) independent of HIV infection and calorie intake per day (P = 0.02). Weight loss in HIV-infected individuals should be investigated for intestinal dysfunction especially in low resource settings. © The Author(s) 2016. DOI: 10.1177/0049475515626338 | **INTL** | **JAN TO JUN** | **PMID:**26809467 |
|  | Islam MS(1), Baqui AH, Zaidi AK, Bhutta ZA, Panigrahi P, Bose A, Soofi SB, KaziAM, Mitra DK, Isaac R, Nanda P, Connor NE, Roth DE, Qazi SA, El Arifeen S, SahaSK; ANISA Methods Group.  Collaborators: Ahmed A, Hossian B, Islam M, Hossain T, Rahman QS, Diaz MH,Winchell J, Shang N, Crook D, Kumar V, Kumar A, Luby SP, Mullany L, Santosham M,Choi Y, Qureshi SM, Ahmed I, Ahmed S, Mahmud A, Begum N, Schrag SJ.  Infection Surveillance Protocol for a Multicountry Population-based Study inSouth Asia to Determine the Incidence, Etiology and Risk Factors for InfectionsAmong Young Infants of 0 to 59 Days Old.  Pediatr Infect Dis J. 2016 May;35(5 Suppl 1):S9-15.  doi:10.1097/INF.0000000000001100.  **Author information:**  (1)From the JAN TO JUNDepartment of Microbiology, Child Health Research Foundation, Dhaka, Bangladesh; †Department of International Health, Johns Hopkins University, Baltimore, Maryland; ‡Department of Pediatrics and Child Health, The Aga Khan University, Karachi, Pakistan; §Department of Epidemiology and Pediatrics, University of Nebraska Medical Center, Omaha, Nebraska; ¶Department of Community Health, Christian Medical College, Vellore, India; ‖Asian Institute of Public Health, Bhubaneswar, Odisha, India; JAN TO JUNJAN TO JUNCentre for Child and Adolescent Health, International Centre for Diarrhoeal Disease Research, Dhaka, Bangladesh; ††Department of Paediatrics, Hospital for Sick Children, Ontario, Canada; and ‡‡Department of Child and Adolescent Health and Development, World Health Organization, Geneva, Switzerland.  BACKGROUND: Insufficient knowledge of the etiology and risk factors for community-acquired neonatal infection in low-income countries is a barrier to designing appropriate intervention strategies for these settings to reduce the burden and treatment of young infant infection. To address these gaps, we are conducting the Aetiology of Neonatal Infection in South Asia (ANISA) study among young infants in Bangladesh, India and Pakistan. The objectives of ANISA are to establish a comprehensive surveillance system for registering newborns in study catchment areas and collecting data on bacterial and viral etiology and associated risk factors for infections among young infants aged 0-59 days. METHODS: We are conducting active surveillance in 1 peri-urban and 4 rural communities. During 2 years of surveillance, we expect to enroll an estimated 66,000 newborns within 7 days of their birth and to follow-up them until 59 days of age. Community health workers visit each young infant in the study area 3 times in the first week of life and once a week thereafter. During these visits, community health workers assess the newborns using a clinical algorithm and refer young infants with signs of suspected infection to health care facilities where study physicians reassess them and provide care if needed. On physician confirmation of suspected infection, blood and respiratory specimens are collected and tested to identify the etiologic agent. CONCLUSIONS: ANISA is one of the largest initiatives ever undertaken to understand the etiology of young infant infection in low-income countries. The data generated from this surveillance will help guide evidence-based decision making to improve health care in similar settings. DOI: 10.1097/INF.0000000000001100 | **INTL** | **JAN TO JUN** | **PMID:**27070072 |
|  | J. C.Park, N. M. Gandhi, M. A. Carducci, M. A. Eisenberger, A. S. Baras, G. J. Netto,J. J. Liu, C. G. Drake, M. P. Schoenberg, T. J. Bivalacqua and N. M. Hahn Birendra R(1), Kekre NS(1)  A Retrospective Analysis of the Effect on Survival of Time from Diagnosis toNeoadjuvant Chemotherapy to Cystectomy for Muscle Invasive Bladder Cancer  J Urol. 2016 Oct;196(4):1318-9. doi: 10.1016/j.juro.2016.05.096. Epub 2016 Jul 6.  **Author information:** (1)Department of Urology, Christian Medical College and Hospital, Vellore, Tamilnadu, IndiaDOI: 10.1016/j.juro.2016.05.096 | **INTL** | **JUL TO DEC** | **PMID:**27393900 |
|  | Janardana R(1), Danda D(2).  'Outside the box' genes, transcriptions and translations in Rheumatoid arthritis.  Int J Rheum Dis. 2016 Feb;19(2):114-5. doi: 10.1111/1756-185X.12846.  **Author information:**  (1)Department of Clinical Immunology & Rheumatology, Christian Medical College & Hospital, Vellore, India. ramya.aithala@gmail.com. (2)Department of Clinical Immunology & Rheumatology, Christian Medical College & Hospital, Vellore, India. debashisdandacmc@hotmail.com.  DOI: 10.1111/1756-185X.12846 | **INTL** | **JAN TO JUN** | **PMID:**26919171 |
|  | Janardhanan J(1), Patole S(1), Varghese L(1), Rupa V(1), Tirkey AJ(1), VargheseGM(2). Elusive treatment for human rhinosporidiosis. Int J Infect Dis. 2016 Jul;48:3-4. doi: 10.1016/j.ijid.2016.04.013. Epub 2016 Apr21.  **Author information:** (1)Christian Medical College, Vellore, Tamil Nadu, India. (2)Christian Medical College, Vellore, Tamil Nadu, India. Electronic address: [georgemvarghese@hotmail.com](mailto:georgemvarghese@hotmail.com).  OBJECTIVES: The aim of this study was to clarify the contentious taxonomic classification of Rhinosporidium seeberi, the cause of human rhinosporidiosis, which may have treatment implications. METHODS: PCR was used to amplify the internal transcribed spacer (ITS)-2 region from the genomic DNA of the aetiological agent obtained from a sample of human rhinosporidiosis lesions. The amplicon was sequenced and the organism identified using the Basic Local Alignment Search Tools (BLAST).  RESULTS: Phylogenetic analysis revealed that the aetiological agent clustered along with the R. seeberi isolated from humans and also with Amphibiocystidium ranae from frogs. This organism is a member of the order Dermocystida in the class Mesomycetozoea. A patient with disseminated rhinosporidiosis did not respond to conventional therapy with dapsone and surgical excision, and treatment with amphotericin B also proved futile. CONCLUSION: An effective treatment for R. seeberi-a eukaryote belonging to the class Mesomycetozoea-is still elusive. Copyright © 2016. Published by Elsevier Ltd.  DOI: 10.1016/j.ijid.2016.04.013 | **INTL** | **JUL TO DEC** | **PMID:**27109109 |
|  | Jayakanthan K(1), Ramya J(1), Mandal SK(1), Sandhya P(2), Gowri M(3), Danda D(1).  Younger patients with primary Sjögren's syndrome are more likely to have salivaryIgG anti-muscarinic acetylcholine receptor type 3 antibodies.  Clin Rheumatol. 2016 Mar;35(3):657-62. doi: 10.1007/s10067-016-3186-0. Epub 2016Jan 26.  **Author information:**  (1)Department of Clinical Immunology & Rheumatology, Christian Medical College, Vellore, Tamil Nadu, India. (2)Department of Clinical Immunology & Rheumatology, Christian Medical College, Vellore, Tamil Nadu, India. [drsandhya.p123@gmail.com](mailto:drsandhya.p123@gmail.com). (3)Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India.  Acetylcholine type 3 receptor (M3R) is recognized as an autoantigen in primary Sjögren's syndrome (pSS). Assay of anti-M3R antibody levels in serum is fraught with low sensitivity for diagnosis of pSS. Salivary assay is more likely to improve the diagnostic accuracy. Patients with pSS classified either by the American European Consensus Group (AECG) or American college of Rheumatology (ACR) criteria, attending rheumatology clinic between October 2014 and July 2015 were included. Hospital staff and lupus patients constituted healthy and disease controls, respectively. Evaluation of pSS included clinical evaluation, laboratory tests, ESSDAI and ESSPRI scoring. Unstimulated saliva was collected by the spitting method. Salivary IgG antibody against M3R (anti-M3R) was quantified by indirect ELISA. In this study, 43 patients with pSS, 34 with lupus and 42 healthy controls were recruited. The frequency of anti-M3R antibody levels was 55.81, 17.64 and 7 % for pSS, lupus and healthy controls, respectively. Area under the Receiver Operator Characteristic was 0.7791 (95 % CI,, 0.67-0.87). Sensitivity and specificity of the assay for diagnosis of pSS were 44.19 and 88.16 %, respectively. Salivary anti-M3R IgG antibody positivity was associated with lower age, shorter disease duration and higher globulin levels in our cohort. Salivary anti-M3R IgG antibody assay has high specificity in pSS; younger patients and those with hyperglobulinemia more frequently tested positive for this antibody. DOI: 10.1007/s10067-016-3186-0 | **INTL** | **JAN TO JUN** | **PMID:**26809799 |
|  | Jayasree D(1), Shaji RV(1), George B(1), Mathews V(1), Srivastava A(1), EdisonES(1).  Clinical, Hematological and Molecular Analysis of Homozygous Hb E (HBB:c.79G > A) in the Indian Population.  Hemoglobin. 2016;40(1):16-9. doi: 10.3109/03630269.2015.1086880. Epub 2015 Nov11.  **Author information:** (1)a Department of Haematology , Christian Medical College , Vellore , Tamil Nadu , India.  Homozygous Hb E [β26(B8)Glu→Lys; HBB: c.79G > A] is a clinically mild disease with no significant symptoms. Very few studies are available on clinical variability in Hb E disorders. We report the profile of a series of homozygous Hb E patients in the Indian population. We analyzed various genetic factors that contribute to the heterogeneity in the phenotype of homozygous Hb E patients. Analysis of these parameters further enhances our understanding of the Hb E syndrome.DOI: 10.3109/03630269.2015.1086880 | **INTL** | **JUL TO DEC** | **PMID:**26554862 |
|  | Jean SS(1), Coombs G(2), Ling T(3), Balaji V(4), Rodrigues C(5), Mikamo H(6), KimMJ(7), Rajasekaram DG(8), Mendoza M(9), Tan TY(10), Kiratisin P(11), Ni Y(12),Weinman B(13), Xu Y(14), Hsueh PR(15).  Epidemiology and antimicrobial susceptibility profiles of pathogens causingurinary tract infections in the Asia-Pacific region: Results from the Study forMonitoring Antimicrobial Resistance Trends (SMART), 2010-2013.  Int J Antimicrob Agents. 2016 Apr;47(4):328-34.  doi:10.1016/j.ijantimicag.2016.01.008. Epub 2016 Feb 17.  **Author information:**  (1)Emergency Medicine, Department of Emergency and Critical Care Medicine, Wan Fang Hospital, Taipei Medical University, Taipei, Taiwan; Department of Emergency, School of Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan. (2)Royal Perth Hospital, Perth, WA, Australia. (3)Prince of Wales Hospital, Shatin, New Territories, Hong Kong, China. (4)Christian Medical College, Vellore, India. (5)P.D. Hinduja National Hospital & Medical Research Center, Mumbai, India. (6)Aichi Medical University Hospital, Nagakute, Japan. (7)Korea University Anam Hospital, Seoul, South Korea. (8)Hospital Sultanah Aminah Johin Bahru, Johor Bahru, Malaysia. (9)Philippine General Hospital, Manila, Philippines. (10)Changi General Hospital, Singapore. (11)Siriraj Hospital, Bangkok-Noi, Thailand. (12)Ruijin Hospital, Shanghai, China. (13)Merck Sharp & Dohme, Whitehouse Station, NJ, USA. (14)Peking Union Medical College Hospital, Beijing, China. (15)Departments of Laboratory Medicine and Internal Medicine, National Taiwan University Hospital, National Taiwan University College of Medicine, Taipei, Taiwan. Electronic address: [hsporen@ntu.edu.tw](mailto:hsporen@ntu.edu.tw).  A total of 9599 isolates of Gram-negative bacteria (GNB) causing urinary tract infections (UTIs) were collected from 60 centres in 13 countries in the Asia-Pacific region from 2010-2013. These isolates comprised Enterobacteriaceae species (mainly Escherichia coli, Klebsiella pneumoniae, Proteus mirabilis, Klebsiella oxytoca, Enterobacter cloacae and Morganella morganii) and non-fermentative GNB species (predominantly Pseudomonas aeruginosa and Acinetobacter baumannii). In vitro susceptibilities were determined by the agar dilution method and susceptibility profiles were determined using the minimum inhibitory concentration (MIC) interpretive breakpoints recommended by the Clinical and Laboratory Standards Institute in 2015. Production of extended-spectrum β-lactamases (ESBLs) amongst E. coli, K. pneumoniae, P. mirabilis and K. oxytoca isolates was determined by the double-disk synergy test. China, Vietnam, India, Thailand and the Philippines had the highest rates of GNB species producing ESBLs and the highest rates of cephalosporin resistance. ESBL production and hospital-acquired infection (isolates obtained ≥48 h after admission) significantly compromised the susceptibility of isolates of E. coli and K. pneumoniae to ciprofloxacin, levofloxacin and most β-lactams, with the exception of imipenem and ertapenem. However, >87% of ESBL-producing E. coli strains were susceptible to amikacin and piperacillin/tazobactam, indicating that these antibiotics might be appropriate alternatives for treating UTIs due to ESBL-producing E. coli. Fluoroquinolones were shown to be inappropriate as empirical therapy for UTIs. Antibiotic resistance is a serious problem in the Asia-Pacific region. Therefore, continuous monitoring of evolutionary trends in the susceptibility profiles of GNB causing UTIs in Asia is crucial. Copyright © 2016 Elsevier B.V. and the International Society of Chemotherapy. All rights reserved. DOI: 10.1016/j.ijantimicag.2016.01.008 | **INTL** | **JAN TO JUN** | **PMID:**27005459 |
|  | Jeba J(1), Backianathan S(2), Ishitha G(3), Singh A(4).  Oral and gastrointestinal symptomatic metastases as initial presentation of lungcancer.  BMJ Case Rep. 2016 Nov 18;2016. pii: bcr2016217539. doi: 10.1136/bcr-2016-217539.  **Author information:** (1)Palliative Care Unit, Christian Medical College Hospital, Vellore, India. (2)Department of Radiotherapy, Christian Medical College Hospital, Vellore, India. (3)Department of General Pathology, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. (4)Department of Medical Oncology, Christian Medical College and Hospital, Vellore, India.  Metastasis to the tongue, duodenum or pancreas from primary lung cancer is uncommon. Primary lung cancer presenting with symptoms related to metastases at these sites, at initial presentation is extremely rare. We report a 45-year-old man with disseminated lung malignancy who presented with dyspepsia, melena, symptoms due to anaemia and swelling in the tongue. Oral examination revealed a hard submucosal anterior tongue lesion. Biopsies from the tongue lesion and the duodenal ulcer seen on upper gastrointestinal endoscopy were suggestive of metastasis from lung primary. CT revealed lung primary with disseminated metastasis to lung, liver, adrenals, kidneys, head and body of pancreas, duodenum and intra-abdominal lymph nodes. The patient was treated with palliative chemotherapy. The unusual presentation and diagnostic details are discussed. 2016 BMJ Publishing Group Ltd. DOI: 10.1136/bcr-2016-217539 | **INTL** | **JUL TO DEC** | **PMID:**27864300 |
|  | Jeba J(1), Suryawanshi M(2), Gaikwad P(3), Backianathan S(1).  Colonic metastasis in mucoepidermoid carcinoma of the parotid: a rare occurrence.  BMJ Case Rep. 2016 Jan 28;2016. pii: bcr2015213932. doi: 10.1136/bcr-2015-213932.  **Author information:**  (1)Department of Radiotherapy, Christian Medical College Hospital, Vellore, Tamil Nadu, India. (2)Department of General Pathology, Christian Medical College Hospital, Vellore, Tamil Nadu, India. (3)Department of General Surgery Unit 1, Christian Medical College Hospital, Vellore, Tamil Nadu, India.  We present a case of intermediate-grade mucoepidermoid carcinoma of the parotid with late local recurrence and colonic metastasis. A 69-year-old man who had undergone right total conservative parotidectomy followed by adjuvant radiotherapy for intermediate-grade mucoepidermoid carcinoma 10 years prior, presented with a recurrent swelling in the postoperative site and cardiac failure. On evaluation, he was found to have severe anaemia with positive stool occult blood. Colonoscopic evaluation revealed a globular submucosal bulge with erosion 40 cm from the anal verge, the biopsy of which was consistent with mucoepidermoid carcinoma. The presentation, diagnostic details and management of this rare case are discussed. 2016 BMJ Publishing Group Ltd. DOI: 10.1136/bcr-2015-213932 | **INTL** | **JAN TO JUN** | **PMID:**26823365 |
|  | Jehangir S(1), Kurian JJ(1), Jacob TJ(1), Gurram GM(1), Thomas RJ(1), MathaiJ(1), Karl S(1).  Pneumonostomy in the Surgical Management of Hydatid Cyst of the Lung.  Eur J Pediatr Surg. 2016 Mar 28. [Epub ahead of print]  **Author information:**  (1)Department of Paediatric Surgery, Christian Medical College and Hospital, Vellore, Tamil Nadu, India.  Pneumonostomy in the surgical treatment of bilateral hydatid cyst of Background the lung(HCL) was described by Anand et al. This study presents the comparative long-term results of pneumonostomy for simple and complicated HCL. Methods and PaThe pneumonostomy technique was applied to both open and minimally tients invasive operations. The cyst was opened, endocyst removed, and any bronchial openings closed. The pericyst was closed over a 20-French Malecot tube, which was exteriorized and connected to an underwater seal. The tube was removed after 3 weeks by which time a well-established tract had formed. Hospital records of 26 children with 30 HCL who underwent pneumonostomy between 2001 and 2014 were reviewed and followed up. Patients were analyzed in two groups:group1 comprised uncomplicated and group2 complicated HCL. There was a statistically significant difference in the age at presentation in the two groups. The groups were comparable with respect to presenting symptoms, sex ratio, and side or size of Six(20%) children with surgical complications were graded by cyst. Results Clavien-Dindo classification. Three(10%) children qualified as grade 1 and did not require pharmacologic or surgical therapy. Three(10%) children had grade 3 complications; two developed empyema and one pneumothorax. There were no prolonged air leaks. Children with complicated cysts did not require longer hospitalization. Follow-up was possible in 80.76% of the children. The mean duration of follow-up was 21.3 months (interquartile range, 5-63 months). There were no postoperative recurrences or disease-related mortality. Pneumonostomy is a safe and effective technique for dealing with the Conclusion residual cavity in large complicated cysts and bilateral HCL. Georg Thieme Verlag KG Stuttgart · New York. DOI: 10.1055/s-0036-1580701 | **INTL** | **JAN TO JUN** | **PMID:**27019148 |
|  | Jeyaseelan V(1), Jeyaseelan L(1), Yadav B(1).  INCIDENCE OF, AND RISK FACTORS FOR, MALNUTRITION AMONG CHILDREN AGED 5-7 YEARS INSOUTH INDIA.  J Biosoc Sci. 2016 May;48(3):289-305. doi: 10.1017/S0021932015000309. Epub 2015Oct 6.  **Author information:**  (1)Department of Biostatistics,Christian Medical College,Vellore,India.  Protein-energy malnutrition is a major health problem contributing to the burden of disease in developing countries. The aim of this study was to assess the incidence of, and risk factors for, malnutrition among school-going children in south India. A total of 2496 children aged 5-7 years from rural and urban areas of south India were recruited in 1982 and followed up for malnutrition over a period of 9 years. Their body heights and weights were measured every six months and socio-demographic factors such as mother's education and father's education and relevant household characteristics and hygiene practices collected. Body mass index and height-for-age z-scores were used to determine children's levels of underweight and stunting, respectively, classified as normal, mild/moderate or severe. Risk factor analysis was done for pre-pubertal ages only using Generalized Estimating Equations with cumulative odds assumption. There was a significant difference between male and female children in the incidence of severe underweight and stunting (6.4% and 4.2% respectively). Children in households with no separate kitchen had 1.3 (1.0-1.6) times higher odds of being severely underweight (p=0.044) compared with those with a kitchen. Children without a toilet facility had significantly higher odds of severe underweight compared with those who did. Children with illiterate parents had higher odds of severe stunting than those with literate parents. In conclusion, the prevalence of malnutrition among these south Indian children has not changed over the years, and the incidence of severe malnutrition was highest in children when they were at pubertal age. The risk factors for stunting were mostly poverty-related, and those for underweight were mostly hygiene-related. Adolescent children in south India should be screened periodically at school for malnutrition and provided with nutritional intervention if necessary. DOI: 10.1017/S0021932015000309 | **INTL** | **JAN TO JUN** | **PMID:**26440753 |
|  | John J(1), Van Aart CJ(2), Grassly NC(2).  The Burden of Typhoid and Paratyphoid in India: Systematic Review andMeta-analysis.  PLoS Negl Trop Dis. 2016 Apr 15;10(4):e0004616. doi:10.1371/journal.pntd.0004616. eCollection 2016.  **Author information:**  (1)Department of Community Health, Christian Medical College, Vellore, India. (2)Department of Infectious Disease Epidemiology, Imperial College London, London, United Kingdom.  BACKGROUND: Typhoid is an important public health challenge for India, especially with the spread of antimicrobial resistance. The decision about whether to introduce a public vaccination programme needs to be based on an understanding of disease burden and the age-groups and geographic areas at risk. METHODS: We searched Medline and Web of Science databases for studies reporting the incidence or prevalence of typhoid and paratyphoid fever confirmed by culture and/or serology, conducted in India and published between 1950 and 2015. We used binomial and Poisson mixed-effects meta-regression models to estimate prevalence and incidence from hospital and community studies, and to identify risk-factors. RESULTS: We identified 791 titles and abstracts, and included 37 studies of typhoid and 18 studies of paratyphoid in the systematic review and meta-analysis. The estimated prevalence of laboratory-confirmed typhoid and paratyphoid among individuals with fever across all hospital studies was 9.7% (95% CI: 5.7-16.0%) and 0.9% (0.5-1.7%) respectively. There was significant heterogeneity among studies (p-values<0.001). Typhoid was more likely to be detected among clinically suspected cases or during outbreaks and showed a significant decline in prevalence over time (odds ratio for each yearly increase in study date was 0.96 (0.92-0.99) in the multivariate meta-regression model). Paratyphoid did not show any trend over time and there was no clear association with risk-factors. Incidence of typhoid and paratyphoid was reported in 3 and 2 community cohort studies respectively (in Kolkata and Delhi, or Kolkata alone). Pooled estimates of incidence were 377 (178-801) and 105 (74-148) per 100,000 person years respectively, with significant heterogeneity between locations for typhoid (p<0.001). Children 2-4 years old had the highest incidence. CONCLUSIONS: Typhoid remains a significant burden in India, particularly among young children, despite apparent declines in prevalence. Infant immunisation with newly-licensed conjugate vaccines could address this challenge. DOI: 10.1371/journal.pntd.0004616 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4833325  **PMID:**27082958 |
|  | Jose R(1), Chakravarthy K, Nair S, Joseph M, Jeyaseelan V, Korula G.  A Randomized Controlled Trial Studying the Role of Dexamethasone in Scalp NerveBlocks for Supratentorial Craniotomy.  J Neurosurg Anesthesiol. 2016 Jan 11. [Epub ahead of print]  **Author information:**  (1)Departments of JAN TO JUNAnaesthesiology †Neurological Sciences, Neuro Intensive Care Division ‡Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India.  BACKGROUND: The aim of this double-blinded randomized control study was to examine the role of the steroid dexamethasone as an adjuvant to lignocaine and ropivacaine in scalp nerve blocks in adults undergoing supratentorial craniotomy under general anesthesia. We compared the intraoperative anesthetic and postoperative analgesic requirement with and without the addition of dexamethasone to the local anesthetics. METHODS: The consented 90 patients were randomized into 2 groups: one group received 8 mg (2 mL) of dexamethasone, whereas the other received 2 mL of normal saline along with the local anesthetics in the scalp nerve block administered soon after induction of general anesthesia. All patients received oral/intravenous dexamethasone perioperatively to decrease cerebral edema. The general anesthetic technique for induction, maintenance, and recovery was standardized in the 2 groups. The primary outcome assessed was the time to administration of the first dose of analgesic postoperatively. The secondary outcomes included intraoperative opioid requirement, time to emergence, and incidence of postoperative nausea and vomiting. RESULTS: There was no significant difference between the dexamethasone and saline groups with respect to time to first analgesic requirement, intraoperative fentanyl requirements, time to emergence from general anesthesia, and incidence of postoperative nausea and vomiting. CONCLUSIONS: Addition of dexamethasone as an adjuvant to local anesthetics in scalp nerve blocks in the setting of perioperative steroid therapy does not appear to provide any additional benefit with respect to prolongation of the duration of the block. DOI: 10.1097/ANA.0000000000000272 | **INT** | **JAN TO JUN** | **PMID:**26756502 |
|  | Joseph AA(1), Pulimood S(2), Manipadam MT(3), Viswabandya A(4), Sigamani E(3).  Extramedullary plasmacytoma: an unusual neoplasm in a HIV-positive patient. Int J STD AIDS. 2016 Sep;27(10):909-11. doi: 10.1177/0956462415605244. Epub 2015Sep 22.  **Author information:** (1)Department of Dermatology, Christian Medical College Hospital, Vellore, Tamil Nadu, India anjusushil2005@gmail.com. (2)Department of Dermatology, Christian Medical College Hospital, Vellore, Tamil Nadu, India. (3)Department of Pathology, Christian Medical College Hospital, Vellore, Tamil Nadu, India. (4)Department of Haematology, Christian Medical College Hospital, Vellore, Tamil Nadu, India.  There is a wide range of plasma cell abnormalities in people living with HIV (PLHIV). Extramedullary plasmacytomas are not common in HIV infection, unlike plasmablastic lymphomas. An HIV-positive 44-year-old man on antiretroviral therapy presented with a rapidly progressing swelling on the face. Imaging revealed underlying bone destruction. Histologically, there was a tumour composed of small to medium-sized plasmacytoid cells admixed with many mature plasma cells and plasmablasts. These were positive for CD138 and MUM 1. Extramedullary multiple myeloma was ruled out as CD56 and cyclin D-1 were negative. EBV was negative. As the tumour cells were mostly mature, plasmablastic lymphoma was also excluded. The presence of a monoclonal protein (1 g%), IgG kappa type, was detected. Neoplasia of plasma cells acquires special clinical characteristics in PLHIV. These patients are younger, with a greater tendency to develop solitary extramedullary plasmacytomas with atypical clinical evolution and greater aggressiveness of the neoplastic process. All of these features, along with a high proliferation index (MIB1 60%) was found in our patient. We report this case for its rarity, histopathological dilemma and its atypical features in HIV infection. © The Author(s) 2015. DOI: 10.1177/0956462415605244 | **INTL** | **JUL TO DEC** | **PMID:**26400264 |
|  | Joseph G(1), Canaud L(2).  Combining Ascending Aorta and Aortic Arch TEVAR.  J Endovasc Ther. 2016 Dec 13. pii: 1526602816682687. [Epub ahead of print]  **Author information:**  (1)Department of Cardiology, Christian Medical College, Vellore, India joseph59@gmail.com. (2)Service de Chirurgie Vasculaire et Thoracique, Hôpital A de Villeneuve, Montpellier, France.  DOI: 10.1177/1526602816682687 | **INTL** | **JAN TO JUN** | **PMID:**27974602 |
|  | Joseph G(1), Premkumar P(2), Thomson V(3), Varghese M(3), Selvaraj D(2),Sahajanandan R(4).  Externalized Guidewires to Facilitate Fenestrated Endograft Deployment in theAortic Arch.  J Endovasc Ther. 2016 Feb;23(1):160-71. doi: 10.1177/1526602815614557. Epub 2015Oct 28.  **Author information:**  (1)Department of Cardiology, Christian Medical College, Vellore, India joseph59@gmail.com. (2)Department of Vascular Surgery, Christian Medical College, Vellore, India. (3)Department of Cardiology, Christian Medical College, Vellore, India. (4)Department of Anesthesiology, Christian Medical College, Vellore, India.  PURPOSE: To describe a precannulated fenestrated endograft system utilizing externalized guidewires to facilitate aortic arch endovascular repair and to report its use in 2 patients with challenging anatomy. TECHNIQUE: For distal arch repair, a fenestration for the left subclavian artery (LSA) is made onsite in a standard thoracic endograft tailored to the patient anatomy; it is precannulated with a nitinol guidewire (NGw), which is passed from the femoral artery and externalized from the left brachial artery prior to endograft delivery system introduction over a parallel stiff guidewire. Steps are then taken to remove guidewire intertwining, prevent NGw wrapping around the delivery system, and orient the LSA fenestration superiorly when the delivery system moves into the arch. Gentle traction on the ends of the NGw during endograft deployment facilitates proper fenestration alignment. A covered stent is deployed in the LSA fenestration. The technique is illustrated in a patient with congenital coarctation of the aorta and descending aortic aneurysm. For total arch repair, endograft fenestrations are made for all 3 arch branches; the left common carotid artery (LCCA) and LSA fenestrations are each cannulated with NGws, which travel together from the femoral artery, pass through a LSA snare loop, and are exteriorized from the LCCA. After endograft deployment, the innominate artery fenestration is separately cannulated using right brachial access. Placement of a parallel externalized hydrophilic guidewire passing through the LCCA fenestration (but not the LSA snare loop) and removal of the LCCA fenestration NGw allows exteriorization of the LSA fenestration NGw from the left brachial artery by pulling the LSA snare. Covered stents are deployed in all 3 fenestrations. The technique is presented in a patient with type B aortic dissection. CONCLUSION: Use of the precannulated fenestrated endograft system described is feasible and has the potential to make aortic arch endovascular repair simpler, more reliable, and safer. © The Author(s) 2015. DOI: 10.1177/1526602815614557 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4712411  **PMID:**26511895 |
|  | Joy P(1), Simon B(2), Prithishkumar IJ(3), Isaac B(3).  Topography of inferior epigastric artery relevant to laparoscopy: a CTangiographic study.  Surg Radiol Anat. 2016 Apr;38(3):279-83. doi: 10.1007/s00276-015-1513-9. Epub2015 Jul 19.  **Author information:**  (1)Department of Anatomy, All India Institute of Medical Sciences, Raipur, Chhattisgarh, 492099, India. drpraisyjoy@gmail.com. (2)Department of Radiology, Christian Medical College, Vellore, Tamilnadu, 632004, India. (3)Department of Anatomy, Christian Medical College, Vellore, Tamilnadu, 632002, India.  PURPOSE: The incidence of inferior epigastric artery (IEA) injury is 0.2-2 %. The aim of this study was to trace the position and course of the inferior epigastric artery in the anterior abdominal wall above the inguinal ligament at three important landmarks, i.e., at the mid-inguinal point, Anterior Superior Iliac Spine (ASIS) and umbilicus in abdominal CT Angiograms. The study also correlates the relationship of body build and the position of the inferior epigastric artery. METHODS: In 50 CT Abdominal angiograms, the course of the inferior epigastric artery was traced and distance between the artery and midline was measured at the above landmarks using measurement tool on the picture archival and communication system. The measurements were analyzed using SPSS version 16 and expressed as mean and standard deviation. Mann-Whitney test was used to compare the mean values and ratios in males and females. Linear regression was done to derive formulas by which the position of the inferior epigastric artery could be found. RESULTS: The mean distance of the inferior epigastric artery from the midline was 5.17 ± 0.93 cm at the level of mid-inguinal point, 4.57 ± 1.05 cm at the level of ASIS and 5.27 ± 1.17 cm at the level of umbilicus. There was a definitive predictive pattern in the course of the artery as seen in correlation and regression analysis. CONCLUSION: The security distance for safe trocar placement was 6 cm at the level of ASIS and 9 cm at the level of umbilicus. Preoperative IEA assessment is helpful in reducing injuries to IEA. DOI: 10.1007/s00276-015-1513-9 | **INTL** | **JAN TO JUN** | **PMID:**26188502 |
|  | Kabeerdoss J(1), Sandhya P(1), Danda D(2).  Gut inflammation and microbiome in spondyloarthritis.  Rheumatol Int. 2016 Apr;36(4):457-68. doi: 10.1007/s00296-015-3414-y. Epub 2015Dec 30.  **Author information:**  (1)Department of Clinical Immunology and Rheumatology, Christian Medical College, Vellore, Tamil Nadu, 632004, India. (2)Department of Clinical Immunology and Rheumatology, Christian Medical College, Vellore, Tamil Nadu, 632004, India. debashisdandacmc@hotmail.com.  Spondyloarthritis (SpA) is chronic inflammatory disease involving joints and the spine. Bowel inflammation is common in SpA, which may be classified as acute or chronic. Chronic gut inflammation is most common in SpA patients with axial involvement as compared to those presenting with peripheral involvement alone. The pathogenesis of gut inflammation in SpA could be explained by two factors-over-activation of immunological cells and altered gut microbiome. This is exemplified by SpA animal models, namely HLA-B27-expressing transgenic animals and SKG mice models. Immunological mechanisms include homing of activated T cells from gut into synovium, excess pro-inflammatory cytokines secretion by immune cells such as IL-23 and genetic variations in immunological genes. The evidence for role of gut microbiome in SpA is gradually emerging. Recently, metagenomic study of gut microbiome by sequencing of microbial nucleic acids has enabled identification of new microbial taxa and their functions in gut of patients with SpA. In SpA, the gut microbiome could emerge as diagnostic and prognostic marker of disease. Modulation of gut microbiome is slated to have therapeutic potential as well. DOI: 10.1007/s00296-015-3414-y | **INTL** | **JAN TO JUN** | **PMID:**26719306 |
|  | Kabeerdoss J(1), Sandhya P(2), Mandal SK(2), Gowri M(3), Danda D(2).  High salivary soluble L-selectin and interleukin-7 levels in Asian Indianpatients with primary Sjögren's syndrome.  Clin Rheumatol. 2016 Dec;35(12):3063-3067. Epub 2016 Sep 12.  **Author information:** (1)Department of Clinical Immunology and Rheumatology, Christian Medical College, Vellore, Tamil Nadu, 632004, India. Jayakanthan@cmcvellore.ac.in. (2)Department of Clinical Immunology and Rheumatology, Christian Medical College, Vellore, Tamil Nadu, 632004, India. (3)Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India.  In present study, we aimed to study salivary soluble L-selectin (sL-selectin), interleukin-7(IjL-7), and lymphotoxin-α levels in primary Sjögren's syndrome (pSS) and their clinical as well as serological correlations. pSS patients fulfilling either the American European Consensus Group (AECG) and/or the American college of Rheumatology (ACR) criteria were recruited. Age- and sex-matched hospital staff were recruited as healthy controls. Unstimulated saliva was collected by the spitting method; sL-selectin, IL-7, and lymphotoxin-α were measured in the saliva using commercial ELISA kits. Forty-three patients with pSS and 31 healthy controls were included in the study. Increased levels of sL-selectin and IL-7 were found in the saliva of patients as compared to controls. ymphotoxin-α was undetectable in the saliva of pSS patients and controls. Salivary sL-selectin positively correlated with rheumatoid factor (r = 0.47; p < 0.003). No other variable including ESSDAI was significantly associated with salivary sL-selectin and IL-7 levels. Indian patients with primary Sjögren's syndrome have higher salivary sL-selectin and IL-7 levels than healthy controls. DOI: 10.1007/s10067-016-3406-7 | **INTL** | **JUL TO DEC** | **PMID:**27620619 |
|  | Kalampokas T(1), Kamath M(2), Boutas I(1), Kalampokas E(3).  Ulipristal acetate for uterine fibroids: a systematic review and meta-analysis.  Gynecol Endocrinol. 2016;32(2):91-6. doi: 10.3109/09513590.2015.1106471. Epub2015 Nov 16.  **Author information:**  (1)a Second Department of Obstetrics and Gynecology, University of Athens, "Aretaieion" Hospital , Athens , Greece . (2)b Reproductive Medicine Unit, Christian Medical College , Vellore, Tamil Nadu , India , and. (3)c Gynaecological Oncology Department, University of Aberdeen , Aberdeen , UK.  Ulipristal acetate (UA), a selective progesterone modulator, has been approved for short-term therapy for symptomatic fibroids. We decided to undertake a systematic review of the best available evidence and draw a more definitive conclusion regarding the efficacy of UA for the management of uterine fibroids. The outcomes included symptomatic relief, quality of life-related parameters, reduction in fibroid size, side effects and recurrence rate. We included four randomised controlled trials which consisted of three trials which compared UA with placebo, and one trial compared it with gonadotropin-releasing hormone analogues for symptomatic relief. The three trials comparing UA with placebo reported significant improvement in symptoms related to excessive uterine bleeding as evidenced by the attainment of amenorrhea or reduction in pictorial blood assessment chart. However, due to the heterogeneity of the available data, a meta-analysis was possible only for one the outcomes - attainment of amenorrhea which indicated improvement in symptoms [57.88 (19.81-169.16); p < 0.00001]. The improved quality of life parameters and reduction in fibroid size was noted in the UA group. With regards to adverse events, even though the three included studies reported increased non-physiological endometrial-related changes following UA, these changes reverted back to normal within 6 months. Short-term use of UA seems to be an effective and safe method of treating uterine fibroids. DOI: 10.3109/09513590.2015.1106471 | **INT** | **JUL TO DEC** | **PMID:**26572056 |
|  | Kaliappan SP(1), Venugopal S(2), Giri S(3), Praharaj I(4), Karthikeyan AS(5),Babji S(6), John J(7), Muliyil J(8), Grassly N(9), Kang G(10).  Factors determining anti-poliovirus type 3 antibodies among orally immunized Indian infants.  Vaccine. 2016 Sep 22;34(41):4979-84. doi: 10.1016/j.vaccine.2016.08.032. Epub2016 Aug 24.  **Author information:** (1)Division of Gastrointestinal Sciences, Christian Medical College, Vellore, India. Electronic address: saravanakumar@cmcvellore.ac.in. (2)Division of  Gastroin testinal Sciences, Christian Medical College, Vellore, India. Electronic address: srinistat09@gmail.com. (3)Division of Gastrointestinal Sciences, Christian Medical College, Vellore, India. Electronic address: sidharthgiri@cmcvellore.ac.in. (4)Division of Gastrointestinal Sciences, Christian Medical College, Vellore, India. Electronic address:  irapraharaj@cmcvellore.ac.in. (5)Division of Gastrointestinal Sciences, Christian Medical College, Vellore, India. Electronic address: arun.karthikeyan@cmcvellore.ac.in. (6)Division of Gastrointestinal Sciences, Christian Medical College, Vellore, India. Electronic address: sudhirbabji@cmcvellore.ac.in. (7)Department of Community Health, Christian Medical College, Vellore, India. Electronic address: [jacob@cmcsph.org](mailto:jacob@cmcsph.org). (8)Division of Gastrointestinal Sciences, Christian Medical College, Vellore, India. Electronic address: jpmuliyil@gmail.com. (9)Department of Infectious Disease Epidemiology, Imperial College London, United Kingdom. Electronic address: n.grassly@imperial.ac.uk. (10)Division of Gastrointestinal Sciences, Christian Medical College, Vellore, India. Electronic address: gkang@cmcvellore.ac.in.  BACKGROUND: Among the three poliovirus serotypes, the lowest responses after vaccination with trivalent oral polio vaccine (tOPV) are to serotype 3. Although improvements in routine immunisation and supplementary immunisation activities have greatly increased vaccine coverage, there are limited data on antibody prevalence in Indian infants. METHODS: Children aged 5-11months with a history of not having received inactivated polio vaccine were screened for serum antibodies to poliovirus serotype 3 (PV3) by a micro-neutralisation assay according to a modified World Health Organization (WHO) protocol. Limited demographic information was collected to assess risk-factors for a lack of protective antibodies. Student's t-test, logistic regression and multilevel logistic regression (MLR) model were used to estimate model parameters. RESULTS: Of 8454 children screened at a mean age of 8.3 (standard deviation [SD]-1.8) months, 88.1% (95% confidence interval (CI): 87.4-88.8) had protective antibodies to PV3. The number of tOPV doses received was the main determinant of seroprevalence; the maximum likelihood estimate yields a 37.7% (95% CI: 36.2-38.3) increase in seroprevalence per dose of tOPV. In multivariable logistic regression analysis increasing age, male sex, and urban residence were also independently associated with seropositivity (Odds Ratios (OR): 1.17 (95% CI: 1.12-1.23) per month of age, 1.27 (1.11-1.46) and 1.24 (1.05-1.45) respectively). CONCLUSION: Seroprevalence of antibodies to PV3 is associated with age, gender and place of residence, in addition to the number of tOPV doses received. Ensuring high coverage and monitoring of response are essential as long as oral vaccines are used in polio eradication. Copyright © 2016 The Author(s). Published by Elsevier Ltd.. All rights reserved. DOI: 10.1016/j.vaccine.2016.08.032 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5038128  **PMID:**27566901 |
|  | Kamath MS(1), Pradhan S(1), Edison ES(2), Velayudhan SR(2), Antonisamy B(3),Karthikeyan M(1), Mangalaraj AM(1), Kunjummen A(1), George K(4).  Chorionic villous sampling through transvaginal ultrasound approach: Aretrospective analysis of 138 cases.  J Obstet Gynaecol Res. 2016 Oct;42(10):1229-1235. doi: 10.1111/jog.13070. pub2016 Jun 29.  **Author information:** (1)Reproductive Medicine Unit, Christian Medical College, Vellore, India. (2)Department of Haematology, Christian Medical College, Vellore, India. (3)Department of Biostatistics, Christian Medical College, Vellore, India. (4)Reproductive edicine Unit, Bangalore Baptist Hospital, Bangalore, India. [gkorula@gmail.com](mailto:gkorula@gmail.com).  AIM: The aim of this study was to evaluate the effectiveness and safety of a transvaginal pproach for chorionic villous sampling (CVS). METHODS: We carried out a retrospective data analysis of all the transvaginal CVS procedures performed for the purpose of prenatal diagnosis in a university-level referral center between January 2000 and December 2014. Women underwent the prenatal testing between 10 and 17 weeks of gestation mainly for hematological disorders involving single gene defects. The main outcomes were successful sampling rate, maternal contamination rate, post-procedure complications rates, and immediate fetal loss rate (<14 days post-procedure). RESULTS: A total of 1138 transvaginal CVS were performed during the study period and were available for analysis. The sampling success rate after the first attempt was 98.5% (1121/1138) and the overall success rate was 99.6% (1133/1138). The maternal contamination rate was 0.4% (5/1138). While two patients had vaginal bleeding (0.2%), fresh retroplacental collection was noted in four patients (0.4%) post-procedure. None of the patients developed ascending uterine infectionfollowing CVS. The immediate fetal loss rate was 0.2% (2/1138).  CONCLUSION: Transvaginal approach is associated with high sampling success, along with low rates of maternal contamination and post-procedure complications; hence, it can be offered as an effective alternative method of CVS. © 2016 Japan Society of Obstetrics and Gynecology. DOI: 10.1111/jog.13070 | **INTL** | **JUL TO DEC** | **PMID:**27352773 |
|  | Kamath V(1), Gnanasekaran KK(2), Mammen J(3).  MYH9-related disorder, a probable May-Hegglin anomaly case series: A tertiarycare experience.  Hematol Oncol Stem Cell Ther. 2016 Dec;9(4):137-140. doi:10.1016/j.hemonc.2016.08.002. Epub 2016 Sep 2.  **Author information:** (1)Department of Transfusion Medicine and Immunohematology, Christian Medical College, Vellore, Tamil Nadu, India. Electronic address: [indu\_7911@yahoo.com](mailto:indu_7911@yahoo.com) (2)Department of Pathology, Christian Medical College, Vellore, Tamil Nadu, India. (3)Department of Transfusion Medicine and Immunohematology, Christian Medical College, Vellore, Tamil Nadu, India.  OBJECTIVE/BACKGROUND: May-Hegglin anomaly (MHA) is a rare familial bleeding disorder characterized by a triad of thrombocytopenia, giant platelets, and Döhle-like inclusion bodies within the leukocytes. The clinical spectrum as well as the pathophysiology of this entity is not well defined. The objective of this work is to present a series of three cases of MHA diagnosed in our hospital, where the patients presented with variable bleeding manifestations, thrombocytopenia, and giant platelets. MATERIALS AND METHODS: We studied three cases of possible MHA. In addition to the clinical examination, complete hemogram, and peripheral blood smear examination, these patients were also subjected to coagulation studies. Although bleeding symptoms varied among these patients, platelet aggregation tests with various agonists showed a normal response.RESULTS: Consistent findings of this entity noted in our patients were mild-to-moderate thrombocytopenia, giant platelets, and Döhle-like inclusions within the leukocytes. CONCLUSION: A diagnosis of MHA could be made based on a thorough peripheral blood smear examination, which also helps to avoid a misdiagnosis of immune thrombocytopenia. Copyright Â© 2016 King Faisal Specialist Hospital & Research Centre. Published by Elsevier Ltd. All rights reserved. DOI: 10.1016/j.hemonc.2016.08.002 | **INTL** | **JUL TO DEC** | **PMID:**27614228 |
|  | Kanagaraj G(1), Elango L(2). Hydrogeochemical processes and impact of tanning industries on groundwaterquality in Ambur, Vellore district, Tamil Nadu, India.  Environ Sci Pollut Res Int. 2016 Dec;23(23):24364-24383. Epub 2016 Sep 21.  **Author information:** (1)Department of Geology, Anna University, Guindy, Chennai, 600 025, India. (2)Department of Geology, Anna University, Guindy, Chennai, 600 025, India. [elango@annauniv.edu](mailto:elango@annauniv.edu).  The present study was carried out to determine the hydrogeochemical processes and the impact of tanning industries on groundwater in Ambur, Vellore district, Tamil Nadu, India. Thirty groundwater samples were collected during pre monsoon (July 2015) and post monsoon (January 2016) from the open and shallow wells around this region and were analyzed for major ions and chromium. The major ion concentration follows the order of Na(+) > Ca(2+) > Mg(2+) > K(+) (cations) and Cl(-) > HCO3(-) > SO4(2-) > NO3(-) (anions) for both seasons. The high concentrations of Na(+), Cl(-), and Cr around the tannery regions indicate the impact of effluent discharged from tannery units. In general, the groundwater of this study area is of Na(+)-Cl(-) type, which is due to the mixing of tannery effluent and cation exchange process. Ionic ratio indicates that the silicate weathering influences the groundwater chemistry. The permissible limit of chromium in the groundwater exceeds in over 50 % of the sampling wells. The factor analysis reveals that the dominant source for ionic contents is due to tannery effluents and cation exchange processes. To overcome this situation, it is essential to improve the performance of the effluent treatment plants so as to remove the salinity of wastewater and to plan for rainfall recharge structures for improving the groundwater recharge. DOI: 10.1007/s11356-016-7639-4 | **INTL** | **JUL TO DEC** | **PMID:**27655619 |
|  | Kang G(1), White AC Jr.  We are (at risk with) what we eat.  Curr Opin Infect Dis. 2016 Oct;29(5):476-7. doi: 10.1097/QCO.0000000000000307.  **Author information:** (1)aDivision of Gastrointestinal Sciences, Christian Medical College, Vellore,India bInfectious Diseases Division, Department of Internal Medicine, University of Texas Medical Branch, Galveston, Texas, USA. DOI: 10.1097/QCO.0000000000000307 | **INTL** | **JUL TO DEC** | **PMID:**27552659 |
|  | Karuppiah Viswanathan AM(1), Irodi A(1), Keshava SN(2), Aneez J(3), Karthik G(3).  Arteriolymphatic Fistula: An Unusual Cause of Spontaneous Swelling in the LeftSupraclavicular Region. Cardiovasc Intervent Radiol. 2016 Sep;39(9):1347-51. doi:10.1007/s00270-016-1348-8. Epub 2016 May 16.  **Author information:** (1)Department of Radiology, Christian Medical College Hospital, Vellore, India.(2)Department of Radiology, Christian Medical College Hospital, Vellore, India. aparna\_shyam@yahoo.com. (3)Department of Medicine, Christian Medical College Hospital, Vellore, India.  An abnormal fistulous communication between an artery and lymphatic system is a rare occurrence. We report a 38-year-old male presenting with sudden onset, spontaneous, pulsatile swelling in the left supraclavicular region following a recent cardiac catheterisation via right femoral arterial access. On evaluation, he was found to have a femoral arteriolymphatic fistula. He was managed conservatively with ultrasound-guided compression with complete resolution of symptoms at follow-up. This case describes a hitherto unknown complication of percutaneous vascular cannulation presenting in an unusual manner, diagnosed with Doppler Ultrasonography and CT angiography and managed effectively with a non-invasive therapeutic image-guided manoeuvre.  DOI: 10.1007/s00270-016-1348-8 | **INTL** | **JUL TO DEC** | **PMID:**27184364 |
|  | Kharkongor MA(1), Cherian KE(2), Kodiatte TA(3), Paul TV(2).  Uncommon cause for anorexia and weight loss.  BMJ Case Rep. 2016 Dec 16;2016. pii: bcr2016218675. doi: 10.1136/bcr-2016-218675.  **Author information:** (1)Department of General Medicine, Christian Medical College, Vellore, TamilNadu, India. (2)Department of Endocrinology, Christian Medical College, Vellore, Tamil Nadu, India. (3)Department of Pathology, Christian Medical College, Vellore, Tamil Nadu, India. DOI: 10.1136/bcr-2016-218675 | **INTL** | **JUL TO DEC** | **PMID:**27986696 |
|  | Korah S(1), Selvin SS, Pradhan ZS, Jacob P, Kuriakose T.  Tenons Patch Graft in the Management of Large Corneal Perforations.  Cornea. 2016 May;35(5):696-9. doi: 10.1097/ICO.0000000000000808.  **Author information:**  (1)JAN TO JUNDepartment of Ophthalmology, Christian Medical College and Hospital, Vellore, India; and†Narayana Nethralaya, Bangalore, India.  PURPOSE: To describe a technique to manage corneal perforations between 3 and 6 mm in size using autologous Tenons tissue with cyanoacrylate glue and a bandage contact lens. METHODS: A thin layer of Tenons capsule harvested from the patient's own eye is used to seal the perforation and act as a scaffold. The Tenons patch graft is spread over the perforation and held in place by the application of cyanoacrylate glue. A bandage contact lens is then placed on the eye. RESULTS: A 6-year retrospective review of 28 patients who underwent this procedure was performed. One patient was lost to follow-up. Of the 27 patients who were followed up, 20 healed completely, with an adherent leucoma and preservation of the anterior chamber. The condition of one patient (with a perforated Pseudomonas corneal ulcer) progressively worsened despite maximum medical therapy and had to undergo evisceration. CONCLUSIONS: This procedure makes use of easily available autologous Tenons tissue in patients with corneal perforations too large to be managed with cyanoacrylate glue alone, to preserve eyeball morphology. A corneal transplant can then be done when the cornea has healed. DOI: 10.1097/ICO.0000000000000808 | **INTL** | **JAN TO JUN** | **PMID:**26989954 |
|  | Koshy M(1), Mishra AK(1), Agrawal B(2), Kurup AR(1), Hansdak SG(1).  Dengue fever complicated by hemophagocytosis.  Oxf Med Case Reports. 2016 Jun 1;2016(6):121-4. doi: 10.1093/omcr/omw043.eCollection 2016.  **Author information:**  (1)Department of Medicine, Unit 4 , Christian Medical College and Hospital , Vellore, Tamil Nadu , India. (2)Department of Pathology , Christian Medical College and Hospital , Vellore, Tamil Nadu , India.  Dengue is a common acute viral febrile illness in the tropics. Although the usual presentation is that of a self-limiting illness, its complications are protean. We report a 29-year-old man who presented with an acute febrile illness and was diagnosed with dengue hemorrhagic fever. Despite appropriate supportive therapy, the patient initially improved, but subsequently had clinical deterioration. Evaluation revealed features of hemophagocytic lymphohistiocytosis. He was successfully treated with glucocorticoids and had an uneventful recovery. This case adds to the limited adult cases of virus-associated hemophagocytic syndrome in the literature and the need for prompt recognition and treatment of this rare complication. DOI: 10.1093/omcr/omw043 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4887830  **PMID:**27274854 |
|  | Kulinkina AV(1), Mohan VR(2), Francis MR(3), Kattula D(3), Sarkar R(3), PlummerJD(4), Ward H(3,)(5), Kang G(3), Balraj V(2), Naumova EN(1,)(3).  Seasonality of water quality and diarrheal disease counts in urban and ruralsettings in south India.  Sci Rep. 2016 Feb 12;6:20521. doi: 10.1038/srep20521.  **Author information:**  (1)Department of Civil and Environmental Engineering, Tufts University, Medford, MA, USA. (2)Department of Community Health, Christian Medical College, Vellore, Tamil Nadu, India. (3)Division of Gastrointestinal Sciences, Christian Medical College, Vellore, Tamil Nadu, India. (4)Department of Civil and Environmental Engineering, Worcester Polytechnic Institute, Worcester, MA, USA. (5)Division of Geographic Medicine and Infectious Diseases, Tufts Medical Center, Boston, MA, USA.  The study examined relationships among meteorological parameters, water quality and diarrheal disease counts in two urban and three rural sites in Tamil Nadu, India. Disease surveillance was conducted between August 2010 and March 2012; concurrently water samples from street-level taps in piped distribution systems and from household storage containers were tested for pH, nitrate, total dissolved solids, and total and fecal coliforms. Methodological advances in data collection (concurrent prospective disease surveillance and environmental monitoring) and analysis (preserving temporality within the data through time series analysis) were used to quantify independent effects of meteorological conditions and water quality on diarrheal risk. The utility of a local calendar in communicating seasonality is also presented. Piped distribution systems in the study area showed high seasonal fluctuations in water quality. Higher ambient temperature decreased and higher rainfall increased diarrheal risk with temperature being the predominant factor in urban and rainfall in rural sites. Associations with microbial contamination were inconsistent; however, disease risk in the urban sites increased with higher median household total coliform concentrations. Understanding seasonal patterns in health outcomes and their temporal links to environmental exposures may lead to improvements in prospective environmental and disease surveillance tailored to addressing public health problems. DOI: 10.1038/srep20521 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4751522  **PMID:**26867519 |
|  | Kumar AS(1), Singh IR(1), Sharma SD(2), John S(1), Ravindran BP(1).  Radiation dose measurements during kilovoltage-cone beam computed tomographyimaging in radiotherapy.  J Cancer Res Ther. 2016 Apr-Jun;12(2):858-63. doi: 10.4103/0973-1482.164699.  **Author information:**  (1)Department of Radiotherapy, Christian Medical College, Vellore, Tamil Nadu, India. (2)Radiological Physics and Advisory Division, Bhabha Atomic Research Center, Mumbai, Maharashtra, India.  OBJECTIVE: The use of image guidance during radiotherapy for accurate localization and setup has become the standard care of practice in radiotherapy. This mostly involves the use of kilovoltage-cone beam computed tomography (kV-CBCT) for verification of patient setup on the first few days and on a weekly basis. Some protocols require this to be performed daily and also before and after the treatment. Though the radiation due to this kV-CBCT is small, the repeated use could deliver a dose that could increase the probability of the stochastic effect. The main purpose of this work is to measure radiation dose during image guidance with kV-CBCT. MATERIALS AND METHODS: In this work, we have attempted to measure the dose during kV-CBCT for different sites both on a humanoid phantom and on patients undergoing image-guided radiotherapy with MOSFETs calibrated against an ion chamber. RESULTS: The dose measurement on patients during kV-CBCT resulted in mean doses of 0.19 and 0.3 cGy to the ipsilateral and contralateral eyes, 0.625 and 1.097 cGy to the surface of the ipsilateral and contralateral breasts, and 3.01 cGy to the surface of the pelvis. CONCLUSION: Radiation dose to the eye, breast, and the surface of the pelvis have been arrived at during CBCT. The doses measured on patients agreed closely with those measured on humanoid phantom and with published values. DOI: 10.4103/0973-1482.164699 | **INTL** | **JAN TO JUN** | **PMID:**27461664 |
|  | Kumar R(1), Kimura F(2), Ahn KW(3), Hu ZH(3), Kuwatsuka Y(4), Klein JP(3),Pasquini M(3), Miyamura K(5), Kato K(6), Yoshimi A(7), Inamoto Y(8), IchinoheT(9), Wood WA Jr(10), Wirk B(11), Seftel M(12), Rowlings P(13), Marks DI(14),Schultz KR(15), Gupta V(16), Dedeken L(17), George B(18), Cahn JY(19), SzerJ(20), Lee JW(21), Ho AY(22), Fasth A(23), Hahn T(24), Khera N(25), Dalal J(26),Bonfim C(27), Aljurf M(28), Atsuta Y(29), Saber W(3).  Comparing Outcomes with Bone Marrow or Peripheral Blood Stem Cells as GraftSource for Matched Sibling Transplants in Severe Aplastic Anemia across DifferentEconomic Regions.  Biol Blood Marrow Transplant. 2016 May;22(5):932-40.  doi:10.1016/j.bbmt.2016.01.012. Epub 2016 Jan 18.  **Author information:**  (1)Department of Medical Oncology and Hematology, CancerCare Manitoba, University of Manitoba, Winnipeg, Manitoba, Canada. Electronic address: rkumar@cancercare.mb.ca. (2)Division of Hematology, National Defense Medical College, Tokorozawa, Japan. (3)Department of Medicine, Center for International Blood and Marrow Transplant Research, Medical College of Wisconsin, Milwaukee, Wisconsin. (4)Department of Medicine, Center for International Blood and Marrow Transplant Research, Medical College of Wisconsin, Milwaukee, Wisconsin; Center for Advanced Medicine and Clinical Research, Nagoya University Hospital, Nagoya, Japan. (5)Department of Hematology, Japanese Red Cross Nagoya First Hospital, Nagoya, Japan. (6)Department of Hematology and Oncology, Children's Medical Center, Japanese Red Cross Nagoya First Hospital, Nagoya, Japan. (7)Department of Pediatrics and Adolescent Medicine, University of Freiburg, Freiburg, Germany. (8)Division of Hematopoietic Stem Cell Transplantation, National Cancer Center Hospital, Tokyo, Japan. (9)Department of Hematology and Oncology, Research Institute for Radiation Biology and Medicine, Hiroshima University, Hiroshima, Japan. (10)Division of Hematology/Oncology, Department of Medicine, University of North Carolina, Chapel Hill, North Carolina. (11)Division of Bone Marrow Transplant, Seattle Cancer Care Alliance, Seattle, Washington. (12)Department of Medical Oncology and Hematology, CancerCare Manitoba, University of Manitoba, Winnipeg, Manitoba, Canada. (13)Calvary Mater Newcastle, HAPS-Pathology North, University of Newcastle, Callaghan, New South Wales, Australia. (14)Pediatric Bone Marrow Transplant, University Hospitals Bristol NHS Trust, Bristol, United Kingdom. (15)BC Children's Hospital and Child and Family Research Institute, Vancouver, British Columbia, Canada. (16)Department of Medical Oncology and Hematology, Princess Margaret Cancer Centre, Toronto, Ontario, Canada. (17)Department of Hematology-Oncology, Hopital Universitaire des Enfants Reine Fabiola, Brussels, Belgium. (18)Christian Medical College, Vellore, India. (19)Department of Hematology, University Hospital, Grenoble, France. (20)Department Clinical Haematology and Bone Marrow Transplantation, Royal Melbourne Hospital, Victoria, Australia. (21)BMT Center, Seoul St. Mary's Hospital, The Catholic University of Korea, Seoul, South Korea. (22)Singapore General Hospital, Singapore, Singapore. (23)Department of Pediatrics, University of Gothenburg, Gothenburg, Sweden. (24)Roswell Park Cancer Institute, Buffalo, New York. (25)Department of Hematology/Oncology, Mayo Clinic, Phoenix, Arizona. (26)Rainbow Babies & Children's Hospital/Case Western Reserve University, Cleveland, Ohio. (27)Hospital de Clinicas, Federal University of Parana, Curitiba, Brazil. (28)Department of Oncology, King Faisal Specialist Hospital Center & Research, Riyadh, Saudi Arabia. (29)Japanese Data Center for Hematopoietic Cell Transplantation and Nagoya University Graduate School of Medicine, Nagoya, Japan.  Bone marrow (BM) is the preferred graft source for hematopoietic stem cell transplantation (HSCT) in severe aplastic anemia (SAA) compared with mobilized peripheral blood stem cells (PBSCs). We hypothesized that this recommendation may not apply to those regions where patients present later in their disease course, with heavier transfusion load and with higher graft failure rates. Patients with SAA who received HSCT from an HLA-matched sibling donor from 1995 to 2009 and reported to the Center for International Blood and Marrow Transplant Research or the Japan Society for Hematopoietic Cell Transplantation were analyzed. The study population was categorized by gross national income per capita and region/countries into 4 groups. Groups analyzed were high-income countries (HIC), which were further divided into United States-Canada (n = 486) and other HIC (n = 1264); upper middle income (UMIC) (n = 482); and combined lower-middle, low-income countries (LM-LIC) (n = 142). In multivariate analysis, overall survival (OS) was highest with BM as graft source in HIC compared with PBSCs in all countries or BM in UMIC or LM-LIC (P < .001). There was no significant difference in OS between BM and PBSCs in UMIC (P = .32) or LM-LIC (P = .23). In LM-LIC the 28-day neutrophil engraftment was higher with PBSCs compared with B M (97% versus 77%, P = .002). Chronic graft-versus-host disease was significantly higher with PBSCs in all groups. Whereas BM should definitely be the preferred graft source for HLA-matched sibling HSCT in SAA, PBSCs may be an acceptable alternative in countries with limited resources when treating patients at high risk of graft failure and infective complications. Copyright © 2016 American Society for Blood and Marrow Transplantation. Published by Elsevier Inc. All rights reserved.DOI: 10.1016/j.bbmt.2016.01.012 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4826285  **PMID:**26797402 |
|  | Kumar V(1), Jose J(2), Joseph G(2).  Rupture of sinus of Valsalva aneurysm into the left ventricle after dissectingthrough the interventricular septum mimicking aortic regurgitation.  Clin Res Cardiol. 2016 Jun;105(6):560-2. doi: 10.1007/s00392-015-0947-8. Epub2015 Dec 14.  **Author information:**  (1)Department of Cardiology, Ruban Patliputra Hospital, Patna, India. docvipin2005@gmail.com. (2)Department of Cardiology, Christian Medical College, Vellore, India.  DOI: 10.1007/s00392-015-0947-8 | **INTL** | **JAN TO JUN** | **PMID:**26667232 |
|  | Kumar V(1), Varghese MJ(2), Raveendran S(3), George OK(1).  Pseudoaneurysm following transradial coronary angiogram.  Eur Heart J. 2016 Jan 14;37(3):252. doi: 10.1093/eurheartj/ehv425. Epub 2015 Sep10.  **Author information:**  (1)Department of Cardiology, Christian Medical College, Vellore, India. (2)Department of Cardiology, Christian Medical College, Vellore, India drmithunjv@gmail.com. (3)Dr. Paul Brand Centre for Hand Surgery, Christian Medical College, Vellore, India.  DOI: 10.1093/eurheartj/ehv425 | **INTL** | **JAN TO JUN** | **PMID:**26358573 |
|  | Kumar V(1), Yadav AK(1), Gang S(2), John O(3), Modi GK(4), Ojha JP(5), PandeyR(6), Parameswaran S(7), Prasad N(8), Sahay M(9), Varughese S(10), JhaV(1,)(3,)(11).  The Indian Chronic Kidney Disease (ICKD) Study: Design and Methods.  Nephrology (Carlton). 2016 Apr 6. doi: 10.1111/nep.12789. [Epub ahead of print]  **Author information:**  (1)Department of Nephrology, Post Graduate Institute of Medical Education and Research, Chandigarh, India. (2)Muljibhai Patel Urological Hospital, Nadiad, India. (3)George Institute for Global Health, New Delhi, India. (4)Samarpan Kidney Institute and Research Center, Bhopal, India. (5)Department of Nephrology, Institute of Medical Science, Banaras Hindu University, Varanasi, India. (6)Department of Nephrology, Institute of Post Graduate Medical Education & Research, Kolkata, India. (7)Department of Nephrology, Jawaharlal Institute of Postgraduate Medical Education & Research, Pondicherry, India. (8)Department of Nephrology, Sanjay Gandhi Postgraduate Institute of Medical Science, Lucknow, India. (9)Department of Nephrology, Osmania Medical College, Osmania General Hospital, Hyderabad, India. (10)Department of Nephrology, Christian Medical College, Vellore, India. (11)University of Oxford, Oxford, UK.  BACKGROUND: The rate and factors that influence progression of chronic kidney disease (CKD) in developing countries like India are unknown. A pan-country prospective, observational cohort study is needed to address these knowledge gaps. METHODS: The Indian Chronic Kidney Disease (ICKD) study will be a cohort study of approximately 5000 patients with mild to moderate CKD presenting to centers that represent different geographical regions in India. Time to 50% decline in baseline estimated glomerular filtration rate, need of renal replacement therapy or any new cardiovascular disease (CVD) event or death from CVD are the primary end points. VALUE OF STUDY: This study will provide the opportunity to determine risk factors for CKD progression and development of CVD in Indian subjects and perform international comparisons to determine ethnic and geographical differences. A bio-repository will provide a chance to discover biomarkers and explore genetic risk factors. This article is protected by copyright. All rights reserved. DOI: 10.1111/nep.12789 | **INTL** | **JAN TO JUN** | **PMID:**27062078 |
|  | Kumaran D(1), John S(2), Isiah R(2), Das S(2).  Management of Locally Advanced Carcinoma Oesophagus withRadiation/Chemoradiation: Single Institute Experience.  J Gastrointest Cancer. 2016 Sep;47(3):313-7. doi: 10.1007/s12029-016-9825-5.  **Author information:** (1)Christian Medical College and Hospital, Vellore, Tamil Nadu, India. damodar.dr@gmail.com. (2)Christian Medical College and Hospital, Vellore, Tamil Nadu, India.  PURPOSE: Oesophageal malignancy is the fourth commonest cancer which has a very poor outcome. In the management of oesophageal malignancy, radiation therapy is underutilized by many physicians due to feared complications though its role is well proven in literature. This study brings the role of radiation therapy in terms of loco- regional and distant relapse. This study characterizes demographic characteristics, treatment modality and the impact of these on recurrence-free survival of locally advanced carcinoma oesophagus. METHOD: In a retrospective analysis over a period of 24 months, 28 patients diagnosed to have locally advanced oesophageal malignancy were included. Neoadjuvant chemotherapy was carried out in 4 patients and concurrent  chemoradiothe rapy in 18 patients. Among the 28 patients, 7 patients who were operable and fit underwent surgery 6-8 weeks after completion of the planned neoadjuvant therapy. All patients received concurrent chemoradiation for a period of 5 weeks with platinum and/or taxane-based chemotherapy. RESULTS: With a median follow-up of 12 months, loco-regional recurrence and distant relapse were substantially less with 14 and 10 %, respectively. The Kaplan-Meier recurrence-free survival was 60 % at 24 months. All patients who had surgery as a part of the multimodality management were disease free at the last follow-up. CONCLUSION: In locally advanced oesophageal malignancy, radiation therapy plays an important role in downsizing the tumour for operability or can also be utilized as the sole modality of management. DOI: 10.1007/s12029-016-9825-5 | **INTL** | **JUL TO DEC** | **PMID:**27146042 |
|  | Kuppswamy B(1), Rajaleelan W(2), Jacob NS(1), Ponniah M(1).  Anesthetic management of an adolescent with congenital glossopharyngeal web.  Saudi J Anaesth. 2016 Apr-Jun;10(2):243-5. doi: 10.4103/1658-354X.168839.  **Author information:**  (1)Department of Anesthesia, Christian Medical College Hospital, Vellore, Tamil Nadu, India. (2)Department of Anesthesia, St. Stephen's Hospital, New Delhi, India.  DOI: 10.4103/1658-354X.168839 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4799625  **PMID:**27051384 |
|  | Lahiri A(1), Alex AG(1), George OK(1).  T-wave inversions with a difference.  BMJ Case Rep. 2016 Mar 31;2016. pii: bcr2015214307. doi: 10.1136/bcr-2015-214307.  **Author information:**  (1)Department of Cardiology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India.  DOI: 10.1136/bcr-2015-214307 | **INTL** | **JAN TO JUN** | **PMID:**27033290 |
|  | Laishram S(1), Anandan S(1), Devi BY(1), Elakkiya M(1), Priyanka B(1),Bhuvaneshwari T(1), Peter JV(2), Subramani K(3), Balaji V(1).  Determination of synergy between sulbactam, meropenem and colistin incarbapenem-resistant Klebsiella pneumoniae and Acinetobacter baumannii isolatesand correlation with the molecular mechanism of resistance.  J Chemother. 2016 Aug;28(4):297-303. doi: 10.1080/1120009X.2016.1143261.  **Author information:**(1)a Department of Microbiology , Christian Medical College , Vellore , Tamil Nadu , India. (2)b Medical Intensive Care Unit , Christian Medical College , Vellore , Tamil Nadu , India. (3)c Surgical Intensive Care Unit , Christian Medical College , , Vellore , Tamil Nadu , India.  Treatment of infections with carbapenem-resistant Gram negative organism is a major challenge especially among intensive care patients. Combinations of sulbactam, meropenem and colistin was studied for its synergistic activity against 100 invasive isolates of carbapenem-resistant Klebsiella pneumoniae and Acinetobacter baumannii-calcoaceticus complex by checkerboard assay and time kill assay (TKA). In addition, presence of carbapenemase production was determined by multiplex PCR. Time kill assay detected more synergy than checkerboard assay. Good bactericidal activity of 70-100% was noted with the combinations tested. Among K. pneumoniae, isolates producing NDM carbapenemase alone showed significantly more synergy than isolates producing OXA-48-like carbapenemases. In treatment of infection with carbapenem-resistant organisms, the site of infection and the type of carbapenemase produced may help to determine the most effective combination of antimicrobials. DOI: 10.1080/1120009X.2016.1143261 | **INTL** | **JUL TO DEC** | **PMID:**27461479 |
|  | Laprise C(1,)(2), Madathil SA(2,)(3), Allison P(1,)(2), Abraham P(4),Raghavendran A(4), Shahul HP(2), ThekkePurakkal AS(2), Castonguay G(2), CoutléeF(5), Schlecht NF(6), Rousseau MC(2,)(3), Franco EL(1,)(2), Nicolau B(1,)(2).  No role for human papillomavirus infection in oral cancers in a region insouthern India.  Int J Cancer. 2016 Feb 15;138(4):912-7. doi: 10.1002/ijc.29827. Epub 2015 Sep 14.  **Author information:**  (1)Division of Cancer Epidemiology, Department of Oncology, McGill University, Montreal, QC, Canada. (2)Division of Oral Health and Society, Faculty of Dentistry, McGill University, Montreal, QC, Canada. (3)Epidemiology and Biostatistics Unit, INRS-Institut Armand-Frappier, Laval, QC, Canada. (4)Department of Clinical Virology, Christian Medical College, Vellore, India. (5)Department of Microbiology and Infectious Diseases, Hôpital Notre-Dame Du Centre De Recherche Du Centre Hospitalier De L'université De Montréal, Montreal, QC, Canada. (6)Department of Epidemiology and Population Health, Albert Einstein College of Medicine, New York, NY.  Oral cancer is a major public health issue in India with ∼ 77,000 new cases and 52,000 deaths yearly. Paan chewing, tobacco and alcohol use are strong risk factors for this cancer in India. Human papillomaviruses (HPVs) are also related to a subset of head and neck cancers (HNCs). We examined the association between oral HPV and oral cancer in a sample of Indian subjects participating in a hospital-based case-control study. We recruited incident oral cancer cases (N = 350) and controls frequency-matched by age and sex (N = 371) from two main referral hospitals in Kerala, South India. Sociodemographic and behavioral data were collected by interviews. Epithelial cells were sampled using Oral CDx® brushes from the oral cancer site and the normal mucosa. Detection and genotyping of 36 HPV genotypes were done using a polymerase chain reaction protocol. Data collection procedures were performed by qualified dentists via a detailed protocol with strict quality control, including independent HPV testing in India and Canada. HPV DNA was detected in none of the cases or controls. Associations between oral cancer and risk factors usually associated with HPV infection, such as oral sex and number of lifetime sexual partners, were examined by logistic regression and were not associated with oral cancer. Lack of a role for HPV infection in this study may reflect cultural or religious characteristics specific to this region in India that are not conducive to oral HPV transmission. A nationwide representative prevalence study is needed to investigate HPV prevalence variability among Indian regions. © 2015 UICC. DOI: 10.1002/ijc.29827 | **INTL** | **JAN TO JUN** | **PMID:**26317688 |
|  | Lee GO(1), Richard SA, Kang G, Houpt ER, Seidman JC, Pendergast LL, Bhutta ZA,Ahmed T, Mduma ER, Lima AA, Bessong P, Jennifer MS, Hossain MI, Chandyo RK,Nyathi E, Lima IF, Pascal J, Soofi S, Ladaporn B, Guerrant RL, Caulfield LE,Black RE, Kosek MN; MAL-ED Network Investigators.  A Comparison of Diarrheal Severity Scores in the MAL-ED Multisite Community-BasedCohort Study.  J Pediatr Gastroenterol Nutr. 2016 Nov;63(5):466-473.  **Author information** (1)JUL TO DECJohns Hopkins Bloomberg School of Public Health, Baltimore †FogartyInternational Center, National Institutes of Health, Bethesda, MD ‡Christian Medical College, Vellore, India §University of Virginia, Charlottesville ||Temple University, Philadelphia, PA ¶Aga Khan University, Karachi, Pakistan #icddr,b (formerly International Centre for Diarrhoeal Disease Research, Bangladesh),Dhaka, Bangladesh JUL TO DECJUL TO DECHaydom Lutheran Hospital, Haydom, Manyara Region, Tanzania††Federal University of Ceará, Fortaleza, Brazil ‡‡University of Venda, Thohoyandou, South Africa §§Centre for International Health, University of Bergen, Bergen, Norway ||||Department of Child Health, Institute of Medicine, Tribhuvan University, Kathmandu, Nepal ¶¶Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand.  OBJECTIVES: There is a lack of consensus on how to measure diarrheal severity. Within the context of a multisite, prospective cohort study, we evaluated the performance of a modified Vesikari score (MAL-ED), 2 previously published scores (Clark and CODA [a diarrheal severity score (Community DiarrheA) published by Lee et al]), and a modified definition of moderate-to-severe diarrhea (MSD) based on dysentery and health care worker diagnosed dehydration. METHODS: Scores were built using maternally reported symptoms or fieldworker-reported clinical signs obtained during the first 7 days of a diarrheal episode. The association between these and the risk of hospitalization were tested using receiver operating characteristic analysis. Severity scores were also related to illness etiology, and the likelihood of the episode subsequently becoming prolonged or persistent. RESULTS: Of 10,159 episodes from 1681 children, 143 (4.0%) resulted in hospitalization. The area under the curve of each score as a predictor of hospitalization was 0.84 (95% confidence interval: 0.81, 0.87) (Clark), 0.85 (0.82, 0.88) (MAL-ED), and 0.87 (0.84, 0.89) (CODA). Severity was also associated with etiology and episode duration. Although families were more likely to seek care for severe diarrhea, approximately half of severe cases never reached the health system. CONCLUSIONS: Community-based diarrheal severity scores are predictive of relevant child health outcomes. Because they require no assumptions about health care access or utilization, they are useful in refining estimates of the burden of diarrheal disease, in estimating the effect of disease control interventions, and in triaging children for referral in low- and middle-income countries in which the rates of morbidity and mortality after diarrhea remain high. DOI: 10.1097/MPG.0000000000001286 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5084640  **PMID:**27347723 |
|  | Liu J(1), Gratz J(1), Amour C(2), Nshama R(2), Walongo T(2), Maro A(3), MdumaE(2), Platts-Mills J(1), Boisen N(4), Nataro J(4), Haverstick DM(5), Kabir F(6),Lertsethtakarn P(7), Silapong S(7), Jeamwattanalert P(7), Bodhidatta L(7), MasonC(7), Begum S(8), Haque R(8), Praharaj I(9), Kang G(9), Houpt ER(1).  Optimization of Quantitative PCR Methods for Enteropathogen Detection.  PLoS One. 2016 Jun 23;11(6):e0158199.  doi: 10.1371/journal.pone.0158199.eCollection 2016.  **Author information:**  (1)Division of Infectious Diseases and International Health, University of Virginia, Charlottesville, Virginia, United States of America. (2)Haydom Global Health Institute, Haydom, Tanzania. (3)Kilimanjaro Clinical Research Institute, Moshi, Tanzania. (4)Department of Pediatrics, University of Virginia, Charlottesville, Virginia, United States of America. (5)Department of Pathology, University of Virginia, Charlottesville, Virginia, United States of America. (6)Department of Pediatrics and Child Health, Aga Khan University, Karachi, Pakistan. (7)Department of Enteric Diseases, Armed Forces Research Institute of Medical Sciences (AFRIMS), Bangkok, Thailand. (8)International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), Dhaka, Bangladesh. (9)Christian Medical College, Vellore, Tamil Nadu, India.  Detection and quantification of enteropathogens in stool specimens is useful for diagnosing the cause of diarrhea but is technically challenging. Here we evaluate several important determinants of quantification: specimen collection, nucleic acid extraction, and extraction and amplification efficiency. First, we evaluate the molecular detection and quantification of pathogens in rectal swabs versus stool, using paired flocked rectal swabs and whole stool collected from 129 children hospitalized with diarrhea in Tanzania. Swabs generally yielded a higher quantification cycle (Cq) (average 29.7, standard deviation 3.5 vs. 25.3 ± 2.9 from stool, P<0.001) but were still able to detect 80% of pathogens with a Cq < 30 in stool. Second, a simplified total nucleic acid (TNA) extraction procedure was compared to separate DNA and RNA extractions and showed 92% (318/344) sensitivity and 98% (951/968) specificity, with no difference in Cq value for the positive results (ΔCq(DNA+RNA-TNA) = -0.01 ± 1.17, P = 0.972, N = 318). Third, we devised a quantification scheme that adjusts pathogen quantity to the specimen's extraction and amplification efficiency, and show that this better estimates the quantity of spiked specimens than the raw target Cq. In sum, these methods for enteropathogen quantification, stool sample collection, and nucleic acid extraction will be useful for laboratories studying enteric disease. DOI: 10.1371/journal.pone.0158199 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4918952  **PMID:**27336160 |
|  | Livingstone RS(1), Grunnet LG(2), Thomas N(3), Eapen A(1), Antonisamy B(4), MohanVR(5), Spurgeon R(3), Frank ID(3), Bygbjerg IC(6), Vaag A(2).  Are hepatic and soleus lipid content, assessed by magnetic resonancespectroscopy, associated with low birth weight or insulin resistance in a ruralIndian population of healthy young men?  Diabet Med. 2016 Mar;33(3):365-70. doi: 10.1111/dme.12852. Epub 2015 Aug 18.  **Author information:**  (1)Department of Radiology, Christian Medical College and Hospital, Vellore, India. (2)Diabetes and Metabolism, Copenhagen University Hospital (Rigshospitalet), Denmark. (3)Department of Endocrinology, Diabetes and Metabolism, Christian Medical College and Hospital, Vellore, India. (4)Department of Biostatistics, Christian Medical College and Hospital, Vellore, India. (5)Department of Community Health, Christian Medical College and Hospital, Vellore, India. (6)Department of Public Health, University of Copenhagen, Copenhagen, Denmark.  AIMS: To assess young healthy men from rural India, who had normal or low birth weights, using magnetic resonance spectroscopy to determine the potential differences in ectopic fat storage between birth weight groups, and to determine if ectopic fat storage was associated with insulin resistance in this population. METHODS: A total of 54 lean men with normal birth weight and 49 lean men with low birth weight (age range 18-22 years) from rural India were recruited. All the men underwent anthropometry, magnetic resonance spectroscopy, a hyperinsulinaemic-euglycaemic clamp and a dual-energy X-ray absorptiometry. RESULTS: The median (interquartile range) values for hepatic cellular lipids, intramyocellular lipids and extramyocellular lipids, measured using magnetic resonance spectroscopy were 0.76 (0.1-1.8)%, 1.27 (1.0-2.3)% and 1.89 (1.3-3.2)%, respectively, for the normal birth weight group and 0.4 (0.1-1.3)%, 1.38 (0.9-2.2)% and 2.07 (1.2-2.8)%, respectively, for the low birth weight group (P > 0.05). No difference in ectopic fat storage was observed between the low and normal birth weight groups, with or without adjustment for age and total fat percentage. Homeostatic model assessment of insulin resistance values were not associated with hepatic cellular, intramyocellular or extramyocellular lipid content in any of the groups. Total fat percentage was the only independent predictor of intramyocellular and extramyocellular lipid content. CONCLUSION: Young and lean men from rural India with low birth weight were not observed to have ectopic fat storage in the liver or muscle, and the amount of liver and muscle fat was unrelated to insulin resistance. Older age and/or an urban affluent lifestyle may be required to show a potential role of ectopic fat storage on insulin resistance in Indian people with low or normal birth weight. © 2015 The Authors. Diabetic Medicine © 2015 Diabetes UK. DOI: 10.1111/dme.12852 | **INTL** | **JAN TO JUN** | **PMID:**26172248 |
|  | Lizneva D(1), Kirubakaran R(2), Mykhalchenko K(3), Suturina L(4), Chernukha G(5),Diamond MP(6), Azziz R(7).  Phenotypes and body mass in women with polycystic ovary syndrome identified inreferral versus unselected populations: systematic review and meta-analysis.  Fertil Steril. 2016 Nov;106(6):1510-1520.e2. doi:10.1016/j.fertnstert.2016.07.1121. Epub 2016 Aug 13.  **Author information:** (1)Department of Obstetrics and Gynecology, Medical College of Georgia, Augusta University, Augusta, Georgia; Medical Company IDK, Samara, Russian Federation; Department of Reproductive Health Protection, Scientific Center of Family Health and Human Reproduction, Irkutsk, Russian Federation. (2)Cochrane South Asia, BV Moses Center for Evidence-Informed Health Care and Health Policy, Christian Medical College, Vellore, India. (3)Department of Obstetrics and Gynecology, Maimonides Medical Center, Brooklyn, New York. (4)Department of Reproductive Health Protection, Scientific Center of Family Health and Human Reproduction, Irkutsk, Russian Federation. (5)Department of Gynecological Endocrinology, Scientific Center for Obstetrics, Gynecology and Perinatology, Moscow, Russian Federation. (6)Department of Obstetrics and Gynecology, Medical College of Georgia, Augusta University, Augusta, Georgia. (7)Department of Obstetrics and Gynecology, Medical College of Georgia, Augusta University, Augusta, Georgia; Department of Medicine, Medical College of Georgia, Augusta University, Augusta, Georgia. Electronic address: [razziz@augusta.edu](mailto:razziz@augusta.edu).  OBJECTIVE: To compare the prevalence of polycystic ovary syndrome (PCOS) phenotypes and obesity among patients detected in referral versus unselected populations. DESIGN: Systematic review and meta-analysis. SETTING: Not applicable. PATIENT(S): Thirteen thousand seven hundred ninety-six reproductive-age patients with PCOS, as defined by the extended Rotterdam 2003 criteria. INTERVENTION(S): Review of PUBMED, EMBASE, and Cochrane Library, 2003-2016. Only observational studies were included. Data were extracted using a web-based, piloted form and combined for meta-analysis. MAIN OUTCOME MEASURE(S): PCOS phenotypes were classified as follows: phenotype A clinical and/or biochemical hyperandrogenism (HA) + oligo-/anovulation (OA) + polycystic ovarian morphology (PCOM); phenotype B, HA+OA; phenotype C, HA+PCOM; and phenotype D, OA+PCOM. RESULT(S): Forty-one eligible studies, reporting on 43 populations, were identified. Pooled estimates of detected PCOS phenotype prevalence were consequently documented in referral versus unselected populations, as [1] phenotype A, 50% (95% confidence interval [CI], 46%-54%) versus 19% (95% CI, 13%-27%); [2] phenotype B, 13% (95% CI, 11%-17%) versus 25% (95% CI, 15%-37%);[3] phenotype C, 14% (95% CI, 12%-16%) versus 34% (95% CI, 25-46%); and [4] phenotype D, 17% (95% CI, 13%-22%) versus 19% (95% CI, 14%-25%). Differences between referral and unselected populations were statistically significant for phenotypes A, B, and C. Referral PCOS subjects had a greater mean body mass index (BMI) than local controls, a difference that was not apparent in unselected PCOS. CONCLUSION(S): The prevalence of more complete phenotypes in PCOS and mean BMI were higher in subjects identified in referral versus unselected populations, suggesting the presence of significant referral bias. Copy right © 2016 American Society for Reproductive Medicine. Published by Elsevier Inc. All rights reserved. DOI: 10.1016/j.fertnstert.2016.07.1121 | **INTL** | **JUL TO DEC** | **PMID:**27530062 |
|  | Long JB(1), Joselyn AS, Bhalla T, Tobias JD, De Oliveira GS Jr, Suresh S; PRANInvestigators.  The Use of Neuraxial Catheters for Postoperative Analgesia in Neonates: AMulticenter Safety Analysis from the Pediatric Regional Anesthesia Network.  Anesth Analg. 2016 Jun;122(6):1965-70. doi: 10.1213/ANE.0000000000001322.  **Author information:**  (1)From the JAN TO JUNDepartment of Pediatric Anesthesiology, Ann & Robert H. Lurie Children's Hospital of Chicago, Northwestern University, Chicago, Illinois; †Department of Anesthesia, Christian Medical College and Hospital, Vellore, Tamil Nadu, India; ‡Department of Pediatric Anesthesiology and Pain Medicine, Nationwide Children's Hospital, The Ohio State University, Columbus, Ohio; and §Department of Anesthesiology, Feinberg School of Medicine, Northwestern University, Chicago, Illinois.  BACKGROUND: Currently, there is limited evidence to support the safety of neuraxial catheters in neonates. Safety concerns have been cited as a major barrier to performing large randomized trials in this population. The main objective of this study is to examine the safety of neuraxial catheters in neonates across multiple institutions. Specifically, we sought to determine the incidence of overall and individual complications encountered when neuraxial catheters were used for postoperative analgesia in neonates. METHODS: This was an observational study that used the Pediatric Regional Anesthesia Network database. Complications and adverse events were defined by the presence of at least 1 of the following intraoperative and/or postoperative factors: catheter malfunction (dislodgment/occlusion), infection, block abandoned (unable to place), block failure (no evidence of block), vascular (blood aspiration/hematoma), local anesthetic systemic toxicity, excessive motor block, paresthesia, persistent neurologic deficit, and other (e.g., intra-abdominal misplacement, tremors). Additional analyses were performed to identify the use of potentially toxic doses of local anesthetics. RESULTS: The study cohort included 307 neonates with a neuraxial catheter. There were 41 adverse events and complications recorded, resulting in an overall incidence of complications of 13.3% (95% confidence interval, 9.8%-17.4%). Among the complications, catheter malfunction, catheter contamination, and vascular puncture were common. None of the complications resulted in long-term complications and/or sequelae, resulting in an estimated incidence of any serious complications of 0.3% (95% confidence interval, 0.08%-1.8%). There were 120 of 307 patients who received intraoperative and/or postoperative infusions consistent with a potentially toxic local anesthetic dose in neonates. The incidence of potentially toxic local anesthetic infusion rates increased over time (P = 0.008). CONCLUSIONS: Neuraxial catheter techniques for intraoperative and postoperative analgesia appear to be safe in neonates. Further studies to confirm our results and to establish the efficacy of these techniques across different surgical procedures are required. We suggest that each center that uses neuraxial anesthesia techniques in neonates closely evaluate the dose limits for local anesthetic agents and develop rigorous quality assurance methods to ensure potentially toxic doses are not used. DOI: 10.1213/ANE.0000000000001322 | **INTL** | **JAN TO JUN** | **PMID:**27195638 |
|  | Lu J(1), Hou J(2), Liu KY(1), Parmar S(3), De La Fuente A(4), Andersson B(3), YanC(1), Zhou D(5), Tan D(6), Ritchie D(7), Wu D(8), Shpall E(3), Laport GG(9), LiJ(10), Hu J(11), Zhang LS(12), Wang M(3), Malhotra P(13), Jiang Q(1), Qin Y(1),Wong R(14), Champlin R(3), Issaragrisil S(15), Iyer S(16), Mathews V(17), WangY(1), Hu Y(18), Xiao Z(19), Shao Z(20), Rosengarten R(21,)(22), Steuernagle J4th(22,)(23), Xiao JH(1), Orlowski R(3), Chim CS(24).  Asia-Pacific Hematology Consortium Report on approach to multiple myeloma. Surveyresults from the 6th International Hematologic Malignancies Conference: Bridgingthe Gap 2015, Beijing, China.  Leuk Lymphoma. 2016 Jul;57(7):1534-8. doi: 10.3109/10428194.2015.1135434. Epub2016 Feb 17.  **Author information:** (1)a Peking University People's Hospital, Peking University Institute of Hematology , Beijing , China ; (2)b Shanghai Changzheng Hospital , Shanghai , China ; (3)c Department of Stem Cell Transplantation and Cellular Therapy , The University of Texas, MD Anderson Cancer Center , Houston , TX , USA ; (4)d MD Anderson Cancer Center , Madrid , Spain ; (5)e Peking Union Medical College Hospital , Beijing , China ; (6)f Singapore General Hospital, Singapore , Singapore ; (7)g Royal Melbourne Hospital , Melbourne , Australia ; (8)h First Affiliated Hospital of Soochow University , Jiangsu , China , Jiangsu Institute of Hematology ; (9)i Stanford University , Palo Alto , CA , USA ; (10)j First Affiliated Hospital of Nanjing Medical University, Jiangsu Province Hospital , Nanjing , China ; (11)k Ruijin Hospital , Shanghai , China ; (12)l Gansu Provincial Key Laboratory of Hematology , Lanzhou , China ; (13)m Post Graduate Institute of Medical Education and Research , Chandigarh , India ; (14)n Prince of Wales Hospital, the Chinese University of Hong Kong , Hong Kong, China ; (15)o Faculty of Medicine Siriraj Hospital , Bangkok , Thailand ; (16)p Methodist Hospital , Houston , TX , USA ; (17)q Christian Medical College and Hospital , Vellore , India ; (18)r Wuhan Union Hospital , Wuhan , China ; (19)s Institute of Hematology and Hospital of Blood Diseases, Chinese Academy of Medical Sciences , Tianjin , China ; (20)t General Hospital of Tianjin Medical University , Tianjin , China ; (21)u Baylor College of Medicine , Houston , TX , USA ; (22)v MDRing , Houston , TX , USA ; (23)w Johns Hopkins Medical Institute , Baltimore, MD , USA ; (24)x Queen Mary Hospital , Hong Kong. The Asia-Pacific Hematology Consortium (APHCON), in partnership with MDRingTM, a mobile global physician education network, has initiated a detailed longitudinal study of physician knowledge and practice preferences in the Asia-Pacific sphere. The first dataset comes from a series of surveys answered by delegates at the APHCON Bridging The Gap (BTG) conference in Beijing in January, 2015. In this report we present our findings regarding diagnosis and treatment of multiple myeloma (MM). We aim to create a conduit for physicians in this region to share their experiences with the rest of the world, to identify areas of consensus and best practices, and to highlight opportunities for improvement in communication, education and patient care. DOI: 10.3109/10428194.2015.1135434 | **INTL** | **JUL TO DEC** | **PMID:**26887657 |
|  | Madan V(1), Shyamsunder P(1), Han L(1,)(2), Mayakonda A(1), Nagata Y(3),Sundaresan J(1), Kanojia D(1), Yoshida K(3), Ganesan S(4), Hattori N(1), FultonN(5), Tan KT(1), Alpermann T(6), Kuo MC(7), Rostami S(8), Matthews J(9), SanadaM(3), Liu LZ(1), Shiraishi Y(10), Miyano S(10), Chendamarai E(4), Hou HA(11),Malnassy G(5), Ma T(12), Garg M(1), Ding LW(1), Sun QY(1), Chien W(1), IkezoeT(13), Lill M(14), Biondi A(15), Larson RA(16), Powell BL(17), Lübbert M(12),Chng WJ(1,)(2,)(18), Tien HF(11), Heuser M(19), Ganser A(19), Koren-MichowitzM(20,)(21), Kornblau SM(9), Kantarjian HM(9), Nowak D(22), Hofmann WK(22), YangH(1), Stock W(5), Ghavamzadeh A(8), Alimoghaddam K(8), Haferlach T(6), OgawaS(3), Shih LY(7), Mathews V(4), Koeffler HP(1,)(14,)(18).  Comprehensive mutational analysis of primary and relapse acute promyelocyticleukemia.  Leukemia. 2016 Aug;30(8):1672-81. doi: 10.1038/leu.2016.69. Epub 2016 Apr 11.  **Author information:** (1)Cancer Science Institute of Singapore, National University of Singapore,Singapore, Singapore. (2)Department of Medicine, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore. (3)Department of Pathology and Tumor Biology, Graduate School of Medicine, Kyoto University, Kyoto, Japan. (4)Department of Haematology, Christian Medical College, Vellore, India. (5)Section of Hematology/Oncology, University of Chicago, Chicago, IL, USA. (6)Munich Leukemia Laboratory (MLL), Munich, Germany. (7)Division of Hematology-Oncology, Department of Internal Medicine, Chang Gung Memorial Hospital, Chang Gung University, Taoyuan, Taiwan. (8)Hematology-Oncology and Stem Cell Transplantation Research Center, Tehran University of Medical Sciences, Tehran, Iran. (9)Section of Molecular Hematology and Therapy, Department of Leukemia, The University of Texas MD Anderson Cancer Center, Houston, TX, USA. (10)Laboratory of DNA Information Analysis, Human Genome Center, Institute of Medical Science, The University of Tokyo, Tokyo, Japan. (11)Department of Internal Medicine, National Taiwan University, Medical College and Hospital, Taipei, Taiwan. (12)Division of Hematology, Oncology and Stem Cell Transplantation, Department of Internal Medicine, University of Freiburg Medical C enter, Freiburg, Germany. (13)Department of Hematology and Respiratory Medicine, Kochi Medical School, Kochi University, Nankoku, Kochi, Japan. (14)Cedars-Sinai Medical Center, Division of Hematology/Oncology, UCLA School of Medicine, Los Angeles, CA, USA. (15)Paediatric Haematology-Oncology Department and 'Tettamanti' Research Centre, Milano-Bicocca University, 'Fondazione MBBM', San Gerardo Hospital, Monza, Italy. (16)Department of Medicine, University of Chicago Comprehensive Cancer Center, Chicago, IL, USA. (17)Department of Internal Medicine, Section on Hematology and Oncology, Comprehensive Cancer Center of Wake Forest University, Winston-Salem, NC, USA. (18)Department of Hematology-Oncology, National University Cancer Institute of Singapore (NCIS), The National University Health System (NUHS), Singapore, Singapore. (19)Department of Hematology, Hemostasis, Oncology, and Stem Cell Transplantation, Hannover Medical School, Hannover, Germany. (20)Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel. (21)Division of Hematology and Bone Marrow Transplantation, Sheba Medical Center, Tel Hashomer, Israel. (22)Department of Hematology and Oncology, University Hospital Mannheim, Medical Faculty Mannheim of the University of Heidelberg, Mannheim, Germany. Acute promyelocytic leukemia (APL) is a subtype of myeloid leukemia characterized by differentiation block at the promyelocyte stage. Besides the presence of chromosomal rearrangement t(15;17), leading to the formation of PML-RARA (promyelocytic leukemia-retinoic acid receptor alpha) fusion, other genetic lterations have also been implicated in APL. Here, we performed comprehensive mutational analysis of primary and relapse APL to identify somatic alterations, which cooperate with PML-RARA in the pathogenesis of APL. We explored the mutational landscape using whole-exome (n=12) and subsequent targeted sequencing of 398 genes in 153 primary and 69 relapse APL. Both primary and relapse APL harbored an average of eight non-silent somatic mutations per exome. We observed recurrent alterations of FLT3, WT1, NRAS and KRAS in the newly diagnosed APL, whereas mutations in other genes commonly mutated in myeloid leukemia were rarely detected. The molecular signature of APL relapse was characterized by emergence of frequent mutations in PML and RARA genes. Our sequencing data also demonstrates incidence of loss-of-function mutations in previously unidentified genes, ARID1B and ARID1A, both of which encode for key components of the SWI/SNF complex. We show that knockdown of ARID1B in APL cell line, NB4, results in large-scale activation of gene expression and reduced in vitro differentiation potential. DOI: 10.1038/leu.2016.69 | **INTL** | **JUL TO DEC** | **PMCID: PMC**4972641  **PMID:**27063598 |
|  | Madhuri V(1), Santhanam M(2), Rajagopal K(2), Sugumar LK(2), Balaji V(2).  WISP3 mutational analysis in Indian patients diagnosed with rogressivepseudorheumatoid dysplasia and report of a novel mutation at p.Y198. Bone Joint Res. 2016 Jul;5(7):301-6. doi: 10.1302/2046-3758.57.2000520.  **Author information:**(1)Paediatric Orthopaedics Unit, Department of Orthopaedics, Christian MedicalCollege, Vellore, Tamil Nadu, 632004, India and Adjunct Scientist, Centre for Stem Cell Research (a unit of inStem, Bengaluru), Christian Medical College, Vellore, Tamil Nadu, 632002, India madhuriwalter@cmcvellore.ac.in. (2)Paediatric Orthopaedics Unit, Department of Orthopaedics, Christian Medical College, Vellore, Tamil Nadu, 632004, India.  OBJECTIVES: To determine the pattern of mutations of the WISP3 gene in clinically identified progressive pseudorheumatoid dysplasia (PPD) in an Indian population.PATIENTS AND METHODS: A total of 15 patients with clinical features of PPD ere enrolled in this study. Genomic DNA was isolated and polymerase chain reaction performed to amplify the WISP3 gene. Screening for mutations was done by conformation-sensitive gel electrophoresis, beginning with the fifth exon and subsequently proceeding to the remaining exons. Sanger sequencing was performed for both forward and reverse strands to confirm the mutations. RESULTS: In all, two of the 15 patients had compound heterozygous mutations: one a nonsense mutation c.156C>A (p.C52JUL TO DEC) in exon 2, and the other a missense mutation c.677G>T (p.G226V) in exon 4. All others were homozygous, with three bearing a nonsense mutation c.156C>A (p.C52JUL TO DEC) in exon 2, three a missense mutation c.233G>A (p.C78Y) in exon 2, five a missense mutation c.1010G>A (p.C337Y) in exon 5, one a nonsense mutation c.348C>A (p.Y116JUL TO DEC) in exon 3, and one with a novel deletion mutation c.593\_597delATAGA (p.Y198JUL TO DEC) in exon 4. CONCLUSION: We identified a novel mutation c.593\_597delATAGA (p.Y198JUL TO DEC) in the fourth exon of the WISP3 gene. We also confirmed c.1010G>A as one of the common mutations in an Indian population with progressive pseudorheumatoid dysplasia.Cite this article: V. Madhuri, M. Santhanam, K. Rajagopal, L. K. Sugumar, V. Balaji. WISP3 mutational analysis in Indian patients diagnosed with progressive pseudorheumatoid dysplasia and report of a novel mutation at p.Y198JUL TO DEC Bone Joint Res 2016;5:301-306. DOI: 10.1302/2046-3758.57.2000520. © 2016 Madhuri et al. DOI: 10.1302/2046-3758.57.2000520 | **INTL** | **JUL TO DEC** | **PMCID: PMC**4957178  **PMID:**27436824 |
|  | Madhusudhan VL(1 ).  Efficacy of 1% acetic acid in the treatment of chronic wounds infected withPseudomonas aeruginosa: prospective randomised controlled clinical trial.  Int Wound J. 2016 Dec;13(6):1129-1136. doi: 10.1111/iwj.12428. Epub 2015 Apr 8.  **Author information:** (1)Department of Plastic Surgery, Christian Medical College, Vellore, India. Chronic wounds are those wounds that are persistent and do not respond to any sort of treatment. The concept of using topical antiseptics on open wounds is to prevent and treat infections. They also help to shorten the time taken to heal the wounds. The use of topical agents on wounds to prevent infection is a minimal ability to develop resistance to the microorganisms. Pseudomonas aeruginosa is a Gram-negative opportunistic pathogen with innate resistance to many antibiotics. In places that are economically backward, these problems get compounded by the inability of patients to afford newer expensive drugs. Topically applied dilute acetic acid, which is cheap and easily available, has been found to be effective in such chronic wounds. In the present study, an attempt has been made to use 1% acetic acid as the sole antimicrobial agent for the treatment of pseudomonal wound infections. A control limb was used in which the wounds were treated with normal saline. Our objective was to evaluate the efficacy of acetic acid in low concentration of 1% in chronic wounds infected with P. aeruginosa. This was a prospective study conducted over a period of 6 months.INCLUSION CRITERIA: All patients with chronic wounds infected with P. aeruginosa. EXCLUSION CRITERIA: Wounds due to massive burns, suspected malignancy, immunocompromised individuals and individuals with sepsis. A total of 32 patients enrolled in the study. Subjects were randomised equally to the 1% acetic acid group and saline dressing group. None of the patients received any systemic antibiotics during the study period and received twice daily dressings. The endpoint of the treatment was wounds free of P. aeruginosa. The duration of treatment required to eliminate the Pseudomonas from the wounds in the acetic acid group was on an average 7 days less than that required by the saline group. P value was <0·001. In the 1% acetic acid group irrespective of the sensitivity of the organism to antibiotics, Pseudomonas organisms were eliminated within the same time period - 4·5 days. In the saline group, susceptible organisms were eliminated within 11·5 days and multidrug-resistant organisms were eliminated by 15·5 days. 1% acetic acid is a simple, safe and effective topical antiseptic that can be used in the elimination of P. aeruginosa from chronic infected wounds. © 2015 Medicalhelplines.com Inc and John Wiley & Sons Ltd. DOI: 10.1111/iwj.12428 | **INTL** | **JUL TO DEC** | **PMID:**25851059 |
|  | Mahajan R(1), Aruldhas BW(2), Sharma M(3), Badyal DK(4), Singh T(3).  Professionalism and ethics: A proposed curriculum for undergraduates.  Int J Appl Basic Med Res. 2016 Jul-Sep;6(3):157-63. doi:10.4103/2229-516X.186963.  **Author information:** (1)Department of Pharmacology, Adesh Institute of Medical Sciences and Research, Bathinda, Punjab, India. (2)Department of Pharmacology, Christian Medical College, Vellore, Tamil Nadu, India. (3)Department of Pediatrics, Christian Medical College, Ludhiana, Punjab, India. (4)Department of Pharmacology, Christian Medical College, Ludhiana, Punjab, India.  Professionalism is the attributes, behaviors, commitments, values, and goals that characterize a profession. In medical professional, it encompasses strong societal role and involves emotional component too. On the other hand, ethics is the study of morality - careful and systematic analysis of moral decisions and behaviors and practicing those decisions. Medical ethics focuses primarily on issues arising out of the practice of medicine. It is generally believed that professionalism and ethics are caught by watching your teachers and seniors and not taught formally. Professionalism and ethics are reviously diffused passively to the students through "the hidden curriculum," leaving a lot to chance. However, over the time, it has been advocated that graduates need to be formally trained in the concepts of professionalism and ethics. In this paper, we propose a formal curriculum on professionalism and ethics, tailor-made for Indian medical graduates. DOI: 10.4103/2229-516X.186963 | **INTL** | **JUL TO DEC** | **PMCID: PMC**4979294  **PMID:**27563578 |
|  | Manesh A(1), Balaji V(2), Kumar DR(3), Rupali P(4).  A case of clinical and microbiological failure of azithromycin therapy inSalmonella enterica serotype Typhi despite low azithromycin MIC.  Int J Infect Dis. 2016 Nov 25;54:62-63. doi: 10.1016/j.ijid.2016.11.409. [Epubahead of print]  **Author information:** (1)Department of Infectious Diseases, Christian Medical College, Vellore, India. Electronic address: abimanesh@gmail.com. (2)Department of Clinical Microbiology, Christian Medical College, Vellore, India. Electronic address: vbalaji@cmcvellore.ac.in. (3)Department of Clinical Microbiology, Christian Medical College, Vellore, India. Electronic address: [speed.naveen1@gmail.com](mailto:speed.naveen1@gmail.com). (4)Department of Infectious Diseases, Christian Medical College, Vellore, India. Electronic address: [prisci@cmcvellore.ac.in](mailto:prisci@cmcvellore.ac.in).  Typhoid fever remains a serious problem in many developing countries. Due to resistance to multiple first line drugs, azithromycin has evolved as an important drug in the treatment of typhoid. While therapy with azithromycin is highly effective, no clinically validated mean inhibitory concentration (MIC) break points or disc diffusion cutoff guidelines are available so far. We describe an Indian adult with clinical and microbiological failure to azithromycin despite low azithromycin MIC. Copyright © 2016. Published by Elsevier Ltd. DOI: 10.1016/j.ijid.2016.11.409 | **INTL** | **JUL TO DEC** | **PMID:**27894983 |
|  | Manesh A(1), John AO(1), Mathew B(1), Varghese L(1), Rupa V(1), Zachariah A(1),Varghese GM(1).  Posaconazole: an emerging therapeutic option for invasive rhino-orbito-cerebralmucormycosis.  Mycoses. 2016 Jul 22. doi: 10.1111/myc.12529. [Epub ahead of print]  **Author information:** (1)Christian Medical College, Vellore, India.  Posaconazole has significant activity against the Mucormycetes. However, data are limited on the clinical efficacy of posaconazole for treating rhino-orbito-cerebral mucormycosis (ROCM). The aim of this study is to assess the efficacy and safety of posaconazole in patients with ROCM. We included 12 consecutive adult patients admitted with ROCM and treated with posaconazole between January 2010 and February 2015. The main outcome of the study was the overall success rate (i.e. either complete or partial response) at the end of treatment. We also assessed serum posaconazole concentrations in a subgroup of patients. Of the 12 patients who received posaconazole, eight patients (66.6%) had complete resolution with median follow-up of 6.5 months (range 2-24 months). Two patients (16.6%) had significant reduction of disease and two (16.6%) had marked residual disease on follow-up. Uncontrolled diabetes was the predisposing factor in all except one patient. One patient developed diarrhoea on posaconazole, which settled without discontinuation of the drug. Posaconazole appears to be a safe and effective antifungal agent in diabetic patients with ROCM, especially in those who have toxicity with polyene therapy. © 2016 Blackwell Verlag GmbH. DOI: 10.1111/myc.12529 | **INTL** | **JUL TO DEC** | **PMID:**27443253 |
|  | Mani SS(1), Kodiatte T(2), Jagannati M(3).  A rare presentation of plasmablastic lymphoma as cutaneous nodules in animmunocompromised patient.  Int J STD AIDS. 2016 Oct 13. pii: 0956462416675037. [Epub ahead of print]  **Author information:** (1)Department of General Medicine, Christian Medical College, Vellore, India selvinsr@gmail.com. (2)Department of General Pathology, Christian Medical College, Vellore, India. (3)Department of General Medicine, Christian Medical College, Vellore, India.  Plasmablastic lymphoma is a rare entity accounting for around 2.7% of all AIDS-related lymphomas. The oral cavity and gastrointestinal tract are the most common sites involved. We report a case of a 34-year-old HIV-positive woman with a rare presentation of cutaneous nodules all over the body. Due to overwhelming tumour burden, she developed tumour lysis syndrome during her hospital stay and succumbed to the illness. © The Author(s) 2016. DOI: 10.1177/0956462416675037 | **INTL** | **JUL TO DEC** | **PMID:**27738277 |
|  | Manish P(1), Rathore S(2), Benjamin SJ(3), Abraham A(2), Jeyaseelan V(4), MathewsJE(5). A randomised controlled trial comparing 30 mL and 80 mL in Foley catheter forinduction of labour after previous Caesarean section. Trop Doct. 2016 Oct;46(4):205-211. Epub 2016 Jan 15.  **Author information:** (1)Registrar, Department of Obstetrics and Gynaecology, Christian Medical College, Vellore, Tamil Nadu, India. (2)Assistant Professor, Department of  Obstetrics and Gynaecology, Christian Medical College, Vellore, Tamil Nadu, India. (3)Associate Professor, Department of Obstetrics and Gynaecology, Christian Medical College, Vellore, Tamil Nadu, India. (4)Lecturer, Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India. (5)Professor, Department of Obstetrics and Gynaecology, Christian Medical College, Vellore, Tamil Nadu, India [og5@cmcvellore.ac.in](mailto:og5@cmcvellore.ac.in).  Inducing labour with a Foley balloon catheter rather than using oxytocin or prostaglandins is considered to be less risky if the uterus is scarred.(1) It is not known if more fluid in the balloon is more effective without being more dangerous. Volumes of 80 mL and 30 mL were compared in 154 eligible women. Mode of delivery, duration of labour and delivery within 24 h were similar in both groups. However, the second group required oxytocin more frequently. Though more scar dehiscences occurred in the first group, the difference was not significant. © The Author(s) 2016. DOI: 10.1177/0049475515626031 | **INTL** | **JUL TO DEC** | **PMID:**26774112 |
|  | Manuel DA(1), Irodi A(1), Sudhakar SV(1), Varkki S(1).  Abnormal Chest Radiograph Due to a Common Lung Finding in Down Syndrome.  Oman Med J. 2016 Jan;31(1):81. doi: 10.5001/omj.2016.16.  **Author information:**  (1)Department of Cardiology, Christian Medical College and Hospital, Vellore, India.  DOI: 10.5001/omj.2016.16 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4720935  **PMID:**26813607 |
|  | Manuel DA(1), Kumar P(2), Jose J(2).  Incidentally detected large neonatal ductus arteriosus aneurysm. Asian Cardiovasc Thorac Ann. 2016 Nov;24(9):900-901. Epub 2015 May 15.  **Author information:**(1)Department of Cardiology, Christian Medical College, Vellore, Tamil Nadu, India devi\_manny@redifmail.com. (2)Department of Cardiology, Christian Medical llege, Vellore, Tamil Nadu, India.DOI: 10.1177/0218492315585046 | **INTL** | **JUL TO DEC** | **PMID:**25979874 |
|  | Manuel DA(1), Lahiri A(1), George OK(1).  Transcatheter closure of ruptured sinus of valsalva to left ventricle.  Ann Pediatr Cardiol. 2016 Jan-Apr;9(1):72-4. doi: 10.4103/0974-2069.171386.  **Author information:**  (1)Department of Cardiology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India.  We report a rare case of ruptured right sinus of valsalva into the left ventricle (LV). Transthoracic echocardiography showed a marked turbulent flow from the right aortic sinus to the LV. We describe a novel technique of closure of this defect with duct occluder, involving the formation of an arterio-arterial loop, without resorting to the usual arteriovenous loop. DOI: 10.4103/0974-2069.171386 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4782474  **PMID:**27011698 |
|  | Mascarenhas M(1), Thomas S(2), Kamath MS(3), Ramalingam R(4), Kongari AM(5),Yuvarani S(6), Srivastava VM(7), George K(5).  Prevalence of chromosomal abnormalities and Y chromosome microdeletion among menwith severe semen abnormalities and its correlation with successful spermretrieval.J Hum Reprod Sci. 2016 Jul-Sep;9(3):187-193.  **Author information:**(1)Leeds Centre for Reproductive Medicine, Seacroft Hospital, Leeds, United Kingdom. (2)Reproductive Medicine Unit, Christian Medical College and Hospital, Vellore, India. (3)Reproductive Medicine Unit, Christian Medical College, Vellore, India. (4)Jeevan Mithra Fertility Centre, Chennai, Tamil Nadu, India. (5)Reproductive Medicine Unit, Bangalore Baptist Hospital, Bengaluru, Karnataka, India. (6)Cytogenetics Unit, Christian Medical College, Vellore, India. (7)Cytogenetics Unit, Christian Medical College and Hospital, Vellore, India.  AIM: To estimate the prevalence of chromosomal abnormalities and Y chromosome microdeletion among men with azoospermia and severe oligozoospermia and its correlation with successful surgical sperm retrieval. SETTING AND DESIGN: A prospective study in a tertiary level infertility unit. MATERIALS AND METHODS: In a prospective observation study, men with azoospermia and severe oligozoospermia (concentration <5 million/ml) attending the infertility center underwent genetic screening. Peripheral blood karyotype was done by Giemsa banding. Y chromosome microdeletion study was performed by a multiplex polymerase chain reaction. RESULTS: The study group consisted of 220 men, 133 of whom had azoospermia and 87 had severe oligozoospermia. Overall, 21/220 (9.5%) men had chromosomal abnormalities and 13/220 (5.9%) men had Y chromosome microdeletions. Chromosomal abnormalities were seen in 14.3% (19/133) of azoospermic men and Y chromosome microdeletions in 8.3% (11/133). Of the 87 men with severe oligozoospermia, chromosomal abnormalities and Y chromosome microdeletions were each seen in 2.3% (2/87). Testicular sperm aspiration was done in 13 men and was successful in only one, who had a deletion of azoospermia factor c.  CONCLUSIONS: Our study found a fairly high prevalence of genetic abnormality in men with severe semen abnormalities and a correlation of genetic abnormalities with surgical sperm retrieval outcomes. These findings support the need for genetic screening of these men prior to embarking on surgical sperm retrieval and assisted reproductive technology intracytoplasmic sperm injection. DOI: 10.4103/0974-1208.192065 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5070401  **PMID:**27803587 |
|  | Mathew AJ(1), Danda D, Conaghan PG.  MRI and ultrasound in rheumatoid arthritis.  Curr Opin Rheumatol. 2016 May;28(3):323-9. doi: 10.1097/BOR.0000000000000282.  **Author information:**  (1)aDepartment of Clinical Immunology & Rheumatology, Christian Medical College, Vellore, India bLeeds Institute of Rheumatic and Musculoskeletal Medicine, University of Leeds & NIHR Leeds Musculoskeletal Biomedical Research Unit, Leeds, UK.  PURPOSE OF REVIEW: To overview the recent literature on the use of MRI and musculoskeletal ultrasonography (MSUS) in rheumatoid arthritis. RECENT FINDINGS: Subclinical inflammation has been widely confirmed, even in the earliest phases of rheumatoid arthritis. The presence of osteitis has added benefits to modern diagnostic criteria, and anticitrullinated peptide antibody positive patients have demonstrated higher osteitis scores. A model for prediction of rheumatoid arthritis onset employing usual clinical data and power Doppler ultrasonography has been reported. The presence of tenosynovitis may also be an early finding in rheumatoid arthritis. Modern imaging continues to inform our concept of pathogenesis with reports on the direct relationship of synovitis to cartilage proteoglycan loss using compositional MRI measures. Growing data on the validity of MRI as an important predictor of clinical and radiographic damage endpoints has been reported and reflected in the growing use of this outcome in many contemporary biologic therapy trials. Much work has been presented on improved and validated MSUS scores with reduced and feasible joint counts. The role of ultrasonography in making sensible decisions when monitoring biologic use, and in tapering, has been reported. SUMMARY: The recent literature demonstrates improved validity and utility for both MRI and MSUS in diagnosis, prognosis and monitoring of rheumatoid arthritis. DOI: 10.1097/BOR.0000000000000282 | **INTL** | **JAN TO JUN** | **PMID:**26927442 |
|  | Mathew AJ(1), Goel R(1), Kumar S(2), Danda D(1).  Childhood-onset Takayasu arteritis: an update.  Int J Rheum Dis. 2016 Feb;19(2):116-26. doi: 10.1111/1756-185X.12718. Epub 2015 Nov 20.  **Author information:**  (1)Department of Clinical Immunology and Rheumatology, Christian Medical College, Vellore, India. (2)Department of Child Health and Pediatric Rheumatology, Christian Medical College, Vellore, India.  Childhood-onset Takayasu arteritis (c-TA) is a distinct subset affecting a wide age group, ranging from young infants to adolescents and it differs from adult TA in many aspects. There is scarcity of data on c-TA worldwide. The disease is classified using the European League Against Rheumatism/Pediatric Rheumatology International Trials Organization/Pediatric Rheumatology European Society criteria. The non-specific nature of presenting complaints and lack of appropriate biomarkers delay the early diagnosis of this illness and many children present with complications, which become irreversible once they set in. One of the largest cohorts of 40 children with c-TA from our center reports hypertension as the commonest presenting feature. Systemic symptoms like headache, fever and weight loss are also described. Assessment of disease in c-TA is done by correlating clinical features with raised inflammatory markers. Advanced imaging plays an important role in diagnosis. In c-TA, the role of magnetic resonance angiography is advocated, taking into consideration the enormous amount of radiation exposure with other modalities. Complications of c-TA include cardiovascular, pulmonary, neurological and those arising secondary to long-term steroid and immunosuppression therapy. © 2015 Asia Pacific League of Associations for Rheumatology and Wiley Publishing Asia Pty Ltd. DOI: 10.1111/1756-185X.12718 | **INTL** | **JAN TO JUN** | **PMID:**26585174 |
|  | Mathew SK(1), Mathew BS, Neely MN, Naik GS, Prabha R, Jacob GG, K S, Fleming DH.  A Nonparametric Pharmacokinetic Approach to Determine the Optimal Dosing Regimenfor 30-Minute and 3-Hour Meropenem Infusions in Critically Ill Patients. Ther Drug Monit. 2016 Oct;38(5):593-9. doi: 10.1097/FTD.0000000000000323.  **Author information:** (1)JUL TO DECClinical Pharmacology Unit, Department of Pharmacology and Clinical Pharmacology, Christian Medical College, Vellore, India; †Laboratory of Applied Pharmacokinetics and Bioinformatics (LAPKB), Children's Hospital of Los Angeles, Keck School of Medicine, University of Southern California, Los Angeles, California; ‡Biocon Research Limited, Bangalore, India; and §Surgical Intensive Care Unit, Division of Critical Care, Christian Medical College, Vellore, India.  BACKGROUND: Pharmacokinetics of meropenem differ widely in the critically ill population. It is imperative to maintain meropenem concentrations above the inhibitory concentrations for most of the interdose interval. A population pharmacokinetic/pharmacodynamic model was developed to determine the probability of target attainment for 3-hour and 30-minute infusion regimens in this population. METHODS: This study was performed in an intensive care setting among adult patients who were initiated on meropenem at a dose of 1000 mg. Multiple blood specimens were collected at predetermined time points during the interdose period, and meropenem concentrations were measured using high performance liquid chromatography. Using Pmetrics, a pharmacokinetic/pharmacodynamic model was developed and validated. Monte Carlo simulation was performed, and probability of target attainment (100% T > minimum inhibitory concentration (MIC), with a probability >0.9) for doubling MICs was determined for different regimens of meropenem. RESULTS: A 2-compartment multiplicative gamma error model best described the population parameters from 34 patients. The pharmacokinetic parameters used in the final model were Ke (elimination rate constant from the central compartment), Vc (volume of distribution of central compartment), KCP and KPC (intercompartmental rate constants), and IC2 (the fitted amount of meropenem in the peripheral compartment). Inclusion of creatinine clearance (CLcreat) and body weight as covariates improved the model prediction (Ke = Ke0 × (Equation is included in full-text article.), Vc = Vc0 × Weight). The Ke and Vc [geometric mean (range)] of the individuals were 0.54 (0.01-2.61)/h and 9.36 (4.35-21.62) L, respectively. The probability of attaining the target, T > MIC of 100%, was higher for 3-hour infusion regimens compared with 30-minute infusion regimens for all ranges of CLcreat. CONCLUSIONS: This study emphasizes that extended regimens of meropenem are preferable for treating infections caused by bacteria with higher MICs. The nonparametric analysis using body weight and CLcreat as covariate adequately predicted the pharmacokinetics of meropenem in critically ill patients with a wide range of renal function. DOI: 10.1097/FTD.0000000000000323 | **INTL** | **JUL TO DEC** | **PMID:**27454665 |
|  | Mathews DM(1), John R(2), Verghese V(3), Parmar H(4), Chaudhary N(2), MishraS(5), Mathew L(2).  Histoplasma capsulatum Infection with Extensive Lytic Bone Lesions Mimicking LCH.  J Trop Pediatr. 2016 Dec;62(6):496-499. Epub 2016 Jun 20.  **Author information:** (1)Department of Pediatrics, Christian Medical College and Hospital, Vellore, Tamil Nadu, India divyamathews82@gmail.co. (2)Department of Pediatrics Haematology-Oncology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. (3)Department of Pediatrics Infectious Diseases, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. (4)Department of Pathology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. (5)Department of Pediatrics, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Multiple lytic bone lesions in a child can be a manifestation of various diseases like Langerhans cell histiocytosis, metastatic neuroblastoma, leukemia, hyperparathyroidism, multifocal osteomyelitis and histoplasmosis. Disseminated histoplasmosis caused by Histoplasma capsulatum var. duboisii is well known to present with multiple osteolytic lesions in immunocompromised adults and is mostly restricted to the African subcontinent. Histoplasmosis seen in American and Asian countries is caused by Histoplasma capsulatum var. capsulatum, which presents with pulmonary and systemic manifestations and rarely bone involvement. We report a case of histoplasmosis, caused by H. capsulatum var. capsulatum with extensive lytic bone lesions in a 13 year old immunocompetent boy who presented with prolonged fever, weight loss and multiple boggy swellings. He responded to amphotericin and is currently on Itraconazole. This case is unique for extensive osteolytic lesions with H. capsulatum var. capsulatum infection in an immunocompetent child. © The Author [2016]. Published by Oxford University Press. All rights reserved. For Permissions, please email: [journals.permissions@oup.com](mailto:journals.permissions@oup.com). DOI: 10.1093/tropej/fmw040 | **INTL** | **JUL TO DEC** | **PMID:**27329388 |
|  | Mehan R(1), Rupa V(2), Lukka VK(1), Ahmed M(3), Moses V(3), Shyam Kumar NK(3).  Association between vascular supply, stage and tumour size of juvenilenasopharyngeal angiofibroma.  Eur Arch Otorhinolaryngol. 2016 Dec;273(12):4295-4303. Epub 2016 Jun 11.  **Author information:** (1)Department of ENT, Christian Medical College, Vellore, 632004, India. (2)Department of ENT, Christian Medical College, Vellore, 632004, India. rupavedantam@cmcvellore.ac.in. (3)Department of Radiology, Christian Medical College, Vellore, India.  Juvenile nasopharyngeal angiofibroma (JNA) is a highly vascular tumour seen in adolescent males. To study the vascular pattern of these tumours, we retrospectively reviewed the records of patients with JNA who underwent preoperative angiography. Most (82.2 %) of the 45 patients assessed were Radkowski stage III with a mean size of 5.29 cm. There was a significant association between tumour stage and size (p = 0.029). Ten different vessels were seen to supply these tumours. All tumours had primary supply from the distal third of the ipsilateral internal maxillary artery (IMA). Accessory vessel supply was chiefly from the Vidian branch of internal carotid artery (ICA) (55.6 %). Stage III tumours were supplied by a greater number of feeding vessels than earlier stage tumours (p < 0.01). Larger tumours were more likely to have ICA supply (p = 0.04). Bilateral supply was seen in 48.7 %. However, there was no predominance of bilateral over ipsilateral IMA supply even in advanced stage tumours. One patient in our series was found to have a caroticocavernous fistula. Residual or recurrent tumours were characterized by new vasculature (100 %) and greater accessory supply from the ipsilateral ICA (85.7 %). Our study highlights the fact that surgical planning cannot be dependent on staging alone and should include preoperative assessment of tumour vasculature by angiography. DOI: 10.1007/s00405-016-4136-9 | **INTL** | **JUL TO DEC** | **PMID:**27289235 |
|  | Mehta Y(1), Jaggi N(2), Rosenthal VD(3), Kavathekar M(4), Sakle A(5), MunshiN(6), Chakravarthy M(7), Todi SK(8), Saini N(9), Rodrigues C(10), Varma K(11),Dubey R(12), Kazi MM(13), Udwadia FE(14), Myatra SN(15), Shah S(16), DwivedyA(17), Karlekar A(18), Singh S(19), Sen N(20), Limaye-Joshi K(21), RamachandranB(22), Sahu S(23), Pandya N(24), Mathur P(25), Sahu S(26), Singh SP(27),Bilolikar AK(28), Kumar S(29), Mehta P(30), Padbidri V(31), Gita N(32), PatnaikSK(33), Francis T(34), Warrier AR(35), Muralidharan S(36), Nair PK(37), SubhedarVR(38), Gopinath R(39), Azim A(40), Sood S(41).  Device-Associated Infection Rates in 20 Cities of India, Data Summary for2004-2013: Findings of the International Nosocomial Infection Control Consortium.  Infect Control Hosp Epidemiol. 2016 Feb;37(2):172-81. doi: 10.1017/ice.2015.276.Epub 2015 Nov 26.  **Author information:**  (1)1Medanta the Medicity,New Delhi,India. (2)2Artemis Health Institute,New Delhi,India. (3)3International Nosocomial Infection Control Consortium,Buenos Aires,Argentina. (4)4Sahyadri Speciality Hospital,Pune,India. (5)5Bombay Hospital,Mumbai,India. (6)6Ruby Hall Clinic,Pune,India. (7)7Fortis Hospitals,Bangalore,India. (8)8Advanced Medicare Research Institute Hospitals,Kolkata,India. (9)9Pushpanjali Crosslay Hospital,Ghaziabad,India. (10)10PD Hinduja National Hospital & Medical Research Centre,Mumbai,India. (11)11Malabar Institute of Medical Sciences,Calicut,India. (12)12Aditya Birla Memorial Hospital,Pune,India. (13)13Noble Hospital,Pune,India. (14)14Breach Candy Hospital Trust,Mumbai,India. (15)15Tata Memorial Hospital,Mumbai,India. (16)16Kokilaben Dhirubhai Ambani Hospital,Mumbai,India. (17)17Dr. L. H. Hiranandani Hospital,Mumbai,India. (18)18Escorts Heart Institute & Research Centre,New Delhi,India. (19)19Amrita Institute of Medical Sciences & Research Center,Kochi,India. (20)20Christian Medical College,Vellore,India. (21)21Jupiter Hospital,Thane,India. (22)22Kanchi Kamakoti Childs Trust Hospital,Chennai,India. (23)23Apollo Hospitals,Bhubaneswar,India. (24)24Bhailal Amin General Hospital,Vadodara,India. (25)25JPNA Trauma Centre- All India Institute of Medical Sciences,New Delhi,India. (26)26Kalinga Hospital,Bhubaneswar,India. (27)27Shree Krishna Hospital,Karamsad,India. (28)28Krishna Institute of Medical Sciences,Secundebarad,India. (29)29Kovai Medical Center and Hospital,Coimbatore,India. (30)30Seth GS Medical College,Mumbai,India. (31)31Jehangir Hospital,Pune,India. (32)32Rao Nursing Home,Pune,India. (33)33Command Hospital Air Force,Bangalore,India. (34)34Frontier Lifeline Hospital,Chennai,India. (35)35Kerala Institute of Medical Sciences,Trivandrum,India. (36)36G Kuppuswami Naidu Memorial Hospital,Coimbatore,India. (37)37Holy Spirit Hospital,Mumbai,India. (38)38Bombay Hospital,Indore,India. (39)39Nizam's Institute of Medical Sciences,Hyderabad,India. (40)40Sanjay Gandhi Postgraduate Institute of Medical Sciences,Lucknow,India. (41)41Military Hospital,Jodhpur,India.  OBJECTIVE: To report the International Nosocomial Infection Control Consortium surveillance data from 40 hospitals (20 cities) in India 2004-2013. METHODS: Surveillance using US National Healthcare Safety Network's criteria and definitions, and International Nosocomial Infection Control Consortium methodology. RESULTS: We collected data from 236,700 ICU patients for 970,713 bed-days Pooled device-associated healthcare-associated infection rates for adult and pediatric ICUs were 5.1 central line-associated bloodstream infections (CLABSIs)/1,000 central line-days, 9.4 cases of ventilator-associated pneumonia (VAPs)/1,000 mechanical ventilator-days, and 2.1 catheter-associated urinary tract infections/1,000 urinary catheter-days In neonatal ICUs (NICUs) pooled rates were 36.2 CLABSIs/1,000 central line-days and 1.9 VAPs/1,000 mechanical ventilator-days Extra length of stay in adult and pediatric ICUs was 9.5 for CLABSI, 9.1 for VAP, and 10.0 for catheter-associated urinary tract infections. Extra length of stay in NICUs was 14.7 for CLABSI and 38.7 for VAP Crude extra mortality was 16.3% for CLABSI, 22.7% for VAP, and 6.6% for catheter-associated urinary tract infections in adult and pediatric ICUs, and 1.2% for CLABSI and 8.3% for VAP in NICUs Pooled device use ratios were 0.21 for mechanical ventilator, 0.39 for central line, and 0.53 for urinary catheter in adult and pediatric ICUs; and 0.07 for mechanical ventilator and 0.06 for central line in NICUs. CONCLUSIONS: Despite a lower device use ratio in our ICUs, our device-associated healthcare-associated infection rates are higher than National Healthcare Safety Network, but lower than International Nosocomial Infection Control Consortium Report. DOI: 10.1017/ice.2015.276 | **INTL** | **JAN TO JUN** | **PMID:**26607300 |
|  | Menon VK(1), George S(1), Sarkar R(1), Giri S(1), Samuel P(2), Vivek R(1),Saravanabavan A(1), Liakath FB(1), Ramani S(1), Iturriza-Gomara M(3), Gray JJ(3),Brown DW(3), Estes MK(4), Kang G(1).  Norovirus Gastroenteritis in a Birth Cohort in Southern India.  PLoS One. 2016 Jun 10;11(6):e0157007. doi: 10.1371/journal.pone.0157007.eCollection 2016.  **Author information:**  (1)Department of Gastrointestinal Sciences, Christian Medical College, Vellore, India. (2)Department of Biostatistics, Christian Medical College, Vellore, India. (3)Virus Reference Department, Centre for Infection, Health Protection Agency, London, United Kingdom. (4)Department of Molecular Virology and Microbiology, Baylor College of Medicine, Houston, Texas, United States of America.  BACKGROUND: Noroviruses are an important cause of gastroenteritis but little is known about disease and re-infection rates in community settings in Asia. METHODS: Disease, re-infection rates, strain prevalence and genetic susceptibility to noroviruses were investigated in a birth cohort of 373 Indian children followed up for three years. Stool samples from 1856 diarrheal episodes and 147 vomiting only episodes were screened for norovirus by RT-PCR. Norovirus positivity was correlated with clinical data, secretor status and ABO blood group. RESULTS: Of 1856 diarrheal episodes, 207 (11.2%) were associated with norovirus, of which 49(2.6%) were norovirus GI, 150(8.1%) norovirus GII, and 8 (0.4%) were mixed infections with both norovirus GI and GII. Of the 147 vomiting only episodes, 30 (20.4%) were positive for norovirus in stool, of which 7 (4.8%) were norovirus GI and 23 (15.6%) GII. At least a third of the children developed norovirus associated diarrhea, with the first episode at a median age of 5 and 8 months for norovirus GI and GII, respectively. Norovirus GI.3 and GII.4 were the predominant genotypes (40.3% and 53.0%) with strain diversity and change in the predominant sub-cluster over time observed among GII viruses. A second episode of norovirus gastroenteritis was documented in 44/174 (25.3%) ever-infected children. Children with the G428A homozygous mutation for inactivation of the FUT2 enzyme (se428se428) were at a significantly lower risk (48/190) of infection with norovirus (p = 0.01).CONCLUSIONS: This is the first report of norovirus documenting disease, re-infection and genetic susceptibility in an Asian birth cohort. The high incidence and apparent lack of genogroupII specific immunity indicate the need for careful studies on further characterization of strains, asymptomatic infection and shedding and immune response to further our understanding of norovirus infection and disease. DOI: 10.1371/journal.pone.0157007 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4902233  **PMID:**27284939 |
|  | Miller E(1), John TJ(2,)(3).  Sailing in Uncharted Waters: Carefully Navigating the Polio Endgame.  PLoS Med. 2016 Oct 4;13(10):e1002141. doi: 10.1371/journal.pmed.1002141.eCollection 2016.  **Author information:** (1)Immunisation Hepatitis and Blood Safety Department, Public Health England, London, United Kingdom. (2)Child Health Foundation, New Delhi, India. (3)Department of Clinical Virology, Christian Medical College, Vellore, India.  In a Perspective linked to the research article by Isobel Blake and colleagues, Elizabeth Miller and T. Jacob John discuss the path towards global polio eradication and the challenges, strategies, and necessary precautions around oral polio vaccine cessation. DOI: 10.1371/journal.pmed.1002141 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5049750  **PMID:**27701414 |
|  | Miraclin TA(1), Matthew A(1), Rupali P(2).  Decreased response to artemisinin combination therapy in falciparum malaria: Apreliminary report from South India.  Trop Parasitol. 2016 Jan-Jun;6(1):85-6. doi: 10.4103/2229-5070.175125.  **Author information:**  (1)Department of Medicine, Christian Medical College, Vellore, Tamil Nadu, India. (2)Department of Infectious Diseases, Christian Medical College, Vellore, Tamil Nadu, India. E-mail: [prisci@cmcvellore.ac.in](mailto:prisci@cmcvellore.ac.in).  DOI: 10.4103/2229-5070.175125 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4778189  **PMID:**26998439 |
|  | Mishra AK(1), Aaron S(2), Abhilash K(2), Iyadurai R(2), Shaikh A(2), LazarusE(2), Alexander V(2), George AA(2), Vishali P(2), Sudarsanam TD(2).  Simple telephone call a feasible, useful and acceptable method of following uppatients with cerebrovascular accidents: Prospective Cohort study in South India.  Int J Stroke. 2016 Jun 15. pii: 1747493016654486. [Epub ahead of print]  **Author information:**  (1)Department of General Medicine, Christian Medical College and Hospital, Vellore, India ajaybalasore@gmail.com. (2)Department of General Medicine, Christian Medical College and Hospital, Vellore, India.  DOI: 10.1177/1747493016654486 | **INTL** | **JAN TO JUN** | **PMID:**27306362 |
|  | Mishra AK(1), Devakiruba NS(2), Jasmine S(3), Sathyendra S(4), Zachariah A(5),Iyadurai R(6).  Clinical spectrum of yellow phosphorous poisoning in a tertiary care centre inSouth India: a case series.  Trop Doct. 2016 Sep 23. pii: 0049475516668986. [Epub ahead of print]  **Author information:** (1)Assistant Professor, Internal Medicine Unit III, Christian Medical College and Hospital Vellore, Tamil Nadu, India ajaybalasore@gmail.com. (2)Assistant Professor, Internal Medicine Unit III, Christian Medical College and Hospital Vellore, Tamil Nadu, India. (3)Associate Professor, Internal Medicine Unit III, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. (4)Professor, Internal Medicine Unit III, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. (5)Head of the Department and Professor, Internal Medicine Unit I, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. (6)Associate Professor, Internal Medicine Unit V, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. Rodenticides such as yellow phosphorus are highly toxic compounds which are commonly used for pest control. Reports of yellow phosphorus poisoning from tropical nations is scanty. In this retrospective study, we report the clinical features, mortality and predictors of mortality among nine patients at a tertiary care centre in south India. Yellowphosphorus consumption was common among a younger age group of patients. The mean duration of presentation after consumption was five days. The most common clinical manifestations seen were abdominal pain and vomiting followed by a depressed sensorium. Features of acute liver failure including coagulopathy were seen in all patients. Despite all patients receiving supportive therapy, a poor outcome or death resulted in the majority. Early referral to a tertiary care centre, meticulous monitoring and supportive measures are key elements of patient management as there are no specific antidotes available at present. Increase in public and physician awareness to the toxin and implementation of preventive policies is of utmost importance.  © The Author(s) 2016.DOI: 10.1177/0049475516668986 | **INTL** | **JUL TO DEC** | **PMID:**27663491 |
|  | Mishra AK(1), George AA(2), George L(2).  Yellow nail syndrome in rheumatoid arthritis: an aetiology beyond thiol drugs.  Oxf Med Case Reports. 2016 Mar 16;2016(3):37-40. doi: 10.1093/omcr/omw013.eCollection 2016.  **Author information:**  (1)General Medicine , Christian Medical College , Vellore, Tamil Nadu , India. (2)Dermatology, Venereology and Leprosy , Christian Medical College , Vellore, Tamil Nadu , India.  Yellow nail syndrome (YNS) is a rare entity characterized by a triad of nail changes, lymphoedema and lung involvement. We report a 57-year-old man with rheumatoid arthritis (RA) and YNS. We have reviewed the previous case reports of RA and YNS and discuss the pulmonary manifestations. DOI: 10.1093/omcr/omw013 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4794558  **PMID:**26989491 |
|  | Mishra SK(1), Mathew GA(2), Paul RR(2), Asif SK(2), John M(2), Varghese AM(2),Kurien M(2).  Endoscopic Repair of CSF Rhinorrhea: An Institutional Experience.  Iran J Otorhinolaryngol. 2016 Jan;28(84):39-43.  **Author information:**  (1)Department of Otorhinolaryngology,Indira Gandhi Institute of Medical Sciences, Patna, Bihar, India. (2)Department of Otorhinolaryngology, Christian Medical College, Vellore, Tamilnadu, India.  INTRODUCTION: Endoscopic repair is considered the treatment of choice incerebrospinal fluid (CSF) rhinorrhea. The aim of our study was to analyze theetiopathogenesis of CSF rhinorrhea, the outcome of treatment and the causes of failure in a developing-country setting. MATERIALS AND METHODS: A retrospective review of patients treated with endoscopic repair for CSF rhinorrhea at a tertiary care hospital in southern India from January 2002 to December 2009 identified 36 patients, the majority of them being women. The defects were closed in three layers using fat, fascia lata and nasal mucosa along with a fibrin sealant in the majority of the patients. Per-operatively, a subarachnoid drain was placed in all patients. Patients were followed up for 1 year. RESULTS: Spontaneous onset of CSF rhinorrhea was noted in 61% of patients. The most common site of leak was found to be the left cribriform plate area. Hence the most common cause of CSF rhinorrhea in our study was spontaneous and the second most common was post-traumatic. Our success rate on the first attempt at endoscopic repair was 100%, with a recurrence rate of 6%. A large defect, failure of localization of the defect, or other co-morbid conditions such as chronic cough may be the most likely causes of recurrence of leak. CONCLUSION: Accurate localization of the site of lesion using a high-resolution computed tomography (CT) scan with magnetic resonance imaging (MRI) and confirmation of the site of leak by intraoperative Valsalva maneuver along with multilayered closure of the dural defect and post-operative lumbar drain appear to be essential for the successful endoscopic repair of CSF rhinorrhea. | **INTL** | **JAN TO JUN** | **PMCID: PMC**4735615  **PMID:**26878002 |
|  | Murhekar MV(1), Mittal M(2), Prakash JA(3), Pillai VM(4), Mittal M(5), GirishKumar CP(6), Shinde S(6), Ranjan P(6), Oak C(6), Gupta N(7), Mehendale S(8),Arora R(7), Gupte M(7).  Acute encephalitis syndrome in Gorakhpur, Uttar Pradesh, India - Role of scrubtyphus.  J Infect. 2016 Dec;73(6):623-626. doi: 10.1016/j.jinf.2016.08.014. Epub 2016 Sep1.  **Author information:**  (1)Dept of Epidemiology, National Institute of Epidemiology, Indian Council of Medical Research, Chennai, Tamil Nadu, India. Electronic address: mmurhekar@gmail.com. (2)Dept of Pediatrics, Baba Raghav Das Medical College, Gorakhpur, Uttar Pradesh, India. (3)Dept of Clinical Microbiology, Christian Medical College, Vellore, Tamil Nadu, India. (4)Dept of Medicine, Jawaharlal Institute of Postgraduate Medical Education & Research, Puducherry, India. (5)Dept of Medicine, Baba Raghav Das Medical College, Gorakhpur, Uttar Pradesh, India. (6)Dept of Epidemiology, National Institute of Epidemiology, Indian Council of Medical Research, Chennai, Tamil Nadu, India. (7)Dept of Epidemiology and Communicable Diseases, Indian Council of Medical Research, New Delhi, India. (8)National Institute of Epidemiology, Indian Council of Medical Research, Chennai, Tamil Nadu, India.  DOI: 10.1016/j.jinf.2016.08.014 | **INTL** | **JUL TO DEC** | **PMID:**27592263 |
|  | Muthuirulandi Sethuvel DP(1), Devanga Ragupathi NK(1), Anandan S(1),Veeraraghavan B(1).  Update on: Shigella new serogroups/serotypes and their antimicrobial resistance.  Lett Appl Microbiol. 2017 Jan;64(1):8-18. doi: 10.1111/lam.12690. Epub 2016 Nov28.  **Author information:**  (1)Department of Clinical Microbiology, Christian Medical College, Vellore, India.  Shigellosis represents a major burden of disease in developing countries. A low infectious dose allows the disease to be spread effectively. Although shigellosis is mostly a self-limiting disease, antibiotics are recommended to reduce deaths, disease symptoms and organism-shedding time. However, in India, antimicrobial resistance among the genus Shigella is more common than among any other enteric bacteria. Notably, new serotypes or subserotypes in Shigella are reported from various parts of the world. Identification of new subserotypes of Shigella spp. is becoming a major issue as these strains are nontypeable by conventional serotyping. The commercially available antisera may not cover all possible epitopes of the O lipopolysaccharide antigen of Shigella serotypes. Therefore, molecular methods which most closely approach the resolution of full serotyping are necessary to identify such strains. In addition, the knowledge of a prevalent serotype in various geographic regions may assist in formulating strategies such as the development of a vaccine to prevent infection especially when the immunity to disease is serotype specific, and to understand the disease burden caused by new Shigella serotypes. © 2016 The Society for Applied Microbiology. DOI: 10.1111/lam.12690 | **INTL** | **JAN TO JUN** | **PMID:**27783408 |
|  | Naik D(1), Shyamasunder AH(1), Mruthyunjaya MD(1), Gupta Patil R(1), Paul TV(1),Christina F(1), Inbakumari M(1), Jose R(2), Lionel J(2), Regi A(2), JeyaseelanPV(3), Thomas N(1).  Masked hypoglycemia in pregnancy.  J Diabetes. 2016 Sep 14. doi: 10.1111/1753-0407.12485. [Epub ahead of print]  **Author information:**  (1)Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore, India. (2)Department of Obstetrics and Gynaecology, Christian Medical College, Vellore, India. (3)Biostatistics, Christian Medical College, Vellore, India.  BACKGROUND: Hypoglycemia is a major hindrance for optimal glycemic control in women with gestational diabetes mellitus (GDM) on insulin. In the present study, masked hypoglycemia (glucose <2.77mmol/L for ≥30 min) was estimated in pregnant women using a continuous glucose monitoring (CGM) system.  METHODS: Twenty pregnant women with GDM on insulin (cases) and 10 age-matched euglycemic pregnant women (controls) between 24 and 36 weeks gestation were recruited. Both groups performed self-monitoring of blood glucose (SMBG) and underwent CGM for 72 h to assess masked hypoglycemia. Masked hypoglycemic episodes were further stratified into two groups based on interstitial glucose (2.28-2.77 and ≤2.22 mmol/L).  RESULTS: Masked hypoglycemia was recorded in 35% (7/20) of cases and 40% (4/10) of controls using CGM, with an average of 1.28 and 1.25 episodes per subject, respectively. Time spent at glucose levels between 2.28 and 2.77 mmol/L did not differ between the two groups (mean 114 vs 90 min; P = 0.617), but cases spent a longer time with glucose ≤2.2 mmol/L. Babies born to women with GDM were significantly lighter than those born to controls (2860 vs 3290 g; P = 0.012). There was no significant difference in birth weight within the groups among babies born to women with or without hypoglycemia.  CONCLUSION: Euglycemic pregnant women and those with GDM on insulin had masked hypoglycemia. Masked hypoglycemia was not associated with adverse maternal or fetal outcomes. Therefore, low glucose levels in the hypoglycemic range may represent a physiologic adaptation in pregnancy. This response is exaggerated in women with GDM on insulin.  © 2016 Ruijin Hospital, Shanghai Jiaotong University School of Medicine and John  Wiley & Sons Australia, Ltd.  DOI: 10.1111/1753-0407.12485 | **INTL** | **JUL TO DEC** | **PMID:**27625296 |
|  | Naik R(1), George G(2), Karuppiah S(2), Philip MA(3).  Hyperlactatemia in patients undergoing adult cardiac surgery undercardiopulmonary bypass: Causative factors and its effect on surgical outcome.  Ann Card Anaesth. 2016 Oct-Dec;19(4):668-675. doi: 10.4103/0971-9784.191579.  **Author information:**  (1)Department of Cardiothoracic and Vascular Surgery, Sri Jayadeva Institute of Cardiovascular Sciences and Research, Bengaluru, Karnataka, India. (2)Department of Anaesthesia, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. (3)Department of Cardiothoracic Surgery, Christian Medical College and Hospital, Vellore, Tamil Nadu, India.  OBJECTIVES OF THE STUDY: To identify the factors causing high lactate levels in patients undergoing cardiac surgery under cardiopulmonary bypass (CPB) and to assess the association between high blood lactate levels and postoperative morbidity and mortality.  METHODS: A retrospective observational study including 370 patients who underwent cardiac surgeries under cardiopulmonary bypass. The patients were divided into 2 groups based on serum lactate levels; those with serum lactate levels greater than or equal to 4 mmol/L considered as hyperlactatemia and those with serum lactate levels less than 4 mmol/L. Blood lactate samples were collected intraoperatively and postoperatively in the ICU. Preoperative and intraoperative risk factors for hyperlactatemia were identified using the highest intraoperative value of lactate. The postoperative morbidity and mortality associated with hyperlactatemia was studied using the overall (intraoperative and postoperative values) peak lactate levels. Preoperative clinical data, perioperative events and postoperative morbidity and mortality were recorded.  RESULTS: Intraoperative peak blood lactate levels of 4.0 mmol/L or more were present in 158 patients (42.7%). Females had higher peak intra operative lactate levels (P = 0.011). There was significant correlation between CPB time (Pearson correlation coefficient r = 0.024; P = 0.003) and aortic cross clamp time (r = 0.02, P = 0.007) with peak intraoperative blood lactate levels. Patients with hyperlactatemia had significantly higher rate of postoperative morbidity like atrial fibrillation (19.9% vs. 5.3%; P = 0.004), prolonged requirement of inotropes (34% vs. 11.8%; P = 0.001), longer stay in the ICU (P = 0.013) and hospital (P = 0.001).  CONCLUSIONS: Hyperlactatemia had significant association with post-operative morbidity. Detection of hyperlactatemia in the perioperative period should be considered as an indicator of inadequate tissue oxygen delivery and must be aggressively corrected.  DOI: 10.4103/0971-9784.191579 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5070327  **PMID:**27716698 |
|  | Naina P(1), Syed KA(2), Koshy L(1), Mathews SS(3).  Sublingual dermoid causing stertor in an infant.  BMJ Case Rep. 2016 Sep 16;2016. pii: bcr2016217135. doi: 10.1136/bcr-2016-217135.  **Author information:**  (1)Department of ENT, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. (2)Department of Otorhinolaryngology, Head & Neck Surgery, Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India. (3)Department of ENT, Christian Medical College, Vellore, Tamil Nadu, India.  Sublingual dermoids are uncommon lesions in the floor of mouth. The most common age of presentation is early adulthood, but presentation in infancy has also been reported. This report highlights the clinical presentation and treatment challenges in infants. An 8-month-old infant presented with inability to close mouth, intermittent stertor and snoring. MRI suggested a sublingual dermoid which was confirmed on histopathology of the surgically enucleated specimen. Sublingual dermoids are uncommon lesions of the floor of mouth. The age of presentation of a sublingual dermoid depends on the initial size of the lesion. Large sublingual dermoids in neonates can present with respiratory embarrassment and need early surgical intervention. Surgical enucleation via an intraoral approach is the treatment of choice with external approach reserved for very large cysts below the mylohyoid. Large sublingual cysts can present with anaesthetic challenges and may need fibreoptic intubation.  2016 BMJ Publishing Group Ltd.  DOI: 10.1136/bcr-2016-217135 | **INTL** | **JUL TO DEC** | **PMID:**27637278 |
|  | Natarajan K(1), Abraham P(2).  Methotrexate administration induces differential and selective protein tyrosinenitration and cysteine nitrosylation in the subcellular organelles of the smallintestinal mucosa of rats.  Chem Biol Interact. 2016 May 5;251:45-59. doi: 10.1016/j.cbi.2016.03.032. Epub2016 Mar 30.  **Author information:**  (1)Department of Biochemistry, Christian Medical College, Bagayam, Vellore 632002, Tamil Nadu, India. (2)Department of Biochemistry, Christian Medical College, Bagayam, Vellore 632002, Tamil Nadu, India. Electronic address: [premilaabraham@cmcvellore.ac.in](mailto:premilaabraham@cmcvellore.ac.in).  Gastrointestinal toxicity is one of the most frequent dose limiting side effects of methotrexate (MTX), a commonly used chemotherapeutic drug. Peroxynitrite (PON) overproduction is reported to contribute to MTX induced gastrointestinal mucositis. However, the consequence of PON overproduction i.e. protein tyrosine nitration and protein cysteine nitrosylation, the subcellular distribution of these modified proteins and their molecular weights have not been investigated yet. Mucositis was induced in Wistar rats by the administration of 3 consecutive i.p. injections of MTX. Tyrosine nitrated proteins and cysteine nitrosylated proteins were determined in the subcellular organelles fractions of mucosa using immunoprecipitation and western blot. The proteins in the subcellular fractions were separated by 1D electrophoresis, and probed with anti –nitrotyrosine antibody and anti-nitrosocysteine antibody. After MTX treatment, a general increase in protein tyrosine nitration as well as a change in the spectrum of proteins that underwent nitration was observed. The relative densities of the 3 nitrotyrosine protein adducts were as follows: Mitochondria > cytosol > micro somes > nucleus. In the mitochondrial fraction increased nitration of 12 kDa, 25 kDa 29Kda, 47 kDa, and 62Kda proteins, in the cytosol increased nitration of 12 kDa, 19 kDa, 45 kDa, and 60 kDa proteins and in the nuclear fraction increased nitration of 17 kDa, 35 kDa, and 58 kDa proteins was observed. On the other hand, MTX treatment resulted to a general decrease in protein cysteine nitrosylation in all the subcellular fractions. These results suggest that MTX induced, PON mediated small intestinal injury is mediated by differential nitration and nitrosylation of proteins in the subcellular organelles with increased protein tyrosine nitration and decreased cysteine nitrosylation. In addition MTX treatment results in selective nitration and nitrosylation of proteins in the intestinal mucosa. This differential nitrosative modifications may contribute to MTX induced small intestinal injury. Copyright © 2016 Elsevier Ireland Ltd. All rights reserved. DOI: 10.1016/j.cbi.2016.03.032 | **INTL** | **JAN TO JUN** | **PMID:**27038877 |
|  | Ninan MM(1), Gowri M(2), Christopher DJ(3), Rupali P(4), Michael JS(1).  The diagnostic utility of line probe assays for multidrug-resistant tuberculosis.  Pathog Glob Health. 2016 Jun-Jul;110(4-5):194-9.  doi:10.1080/20477724.2016.1214350. Epub 2016 Aug 8.  **Author information:**  (1)a Department of Microbiology , Christian Medical College and Hospital, Vellore , India. (2)b Department of Biostatistics , Christian Medical College and Hospital , Vellore , India. (3)c Department of Pulmonary Medicine , Christian Medical College and Hospital , Vellore , India. (4)d Department of Infectious Diseases , Christian Medical College and Hospital , Vellore , India.  Owing to the burden of multidrug-resistant tuberculosis, molecular techniques have been approved by the WHO for the rapid diagnosis of the same. The objectives of this prospective, diagnostic study, conducted at Christian Medical College, a tertiary care center in South India, were to compare the performance of line probe assay (GenoTypeMTBDRplus) with culture, as well as the Xpert MTB/Rif assay on sputum samples. Ninety-one consecutive suspects of multidrug-resistant pulmonary tuberculosis patients from January 2013 to June 2013 were enrolled in this study and the results of line probe assay compared to culture and Xpert MTB/Rif. Compared to culture, the assay demonstrated a sensitivity and specificity of 81.5% (95%CI 67.4-91.1%) and 87.5% (95%CI 71-96.5%) for the detection of tuberculosis, with sensitivity and specificity of 100% (95%CI 85.2-100%) and 93.8% (95%CI 69.8-99.8%), respectively, for rifampicin resistance . For isoniazid resistance, sensitivity and specificity were 89.3% (95%CI 71.8-97.7%) and 100% (95%CI 71.5-100%), respectively. Compared to Xpert MTB/Rif assay, the assay showed a sensitivity of 80% (95%CI 68.2-88.9%) and specificity of 100% (95%CI 85.8-100%) for the detection of tuberculosis a sensitivity of 94.3% (95%CI 80.8-99.3%) and specificity of 94.1% (95%CI 71.3-99.9%) for rifampicin resistance was attained. This assay performed well on smear positive samples, but poorly on smear negative and scanty samples, and can serve as a rapid diagnostic tool, particularly in isoniazid monoresistant cases of tuberculosis, which are not diagnosed by Xpert MTB/Rif. DOI: 10.1080/20477724.2016.1214350 | **INTL** | **JAN TO JUN** | **PMCID: PMC**5072114  **PMID:**27499239 |
|  | Paarel JP(1), Singh G, Punnen GE, Prabhu K.  The Use of Intracranial Doppler as a Cause for Intraoperative Hyperthermia.  J Neurosurg Anesthesiol. 2016 Mar 18. [Epub ahead of print]  **Author information:**  (1)Christian Medical College and Hospital Vellore, Vellore, Tamil Nadu, India.  DOI: 10.1097/ANA.0000000000000298 | **INTL** | **JAN TO JUN** | **PMID:**26998651 |
|  | Padaki PA(1), Sachithanandham J(1), Isaac R(2), Ramalingam VV(1), Abraham OC(3),Pulimood SA(4), Kannangai R(1).  The performance of reverse transcriptase assay for the estimation of the plasmaviral load in HIV-1 and HIV-2 infections.  Infect Dis (Lond). 2016;48(6):467-71. doi: 10.3109/23744235.2015.1122832. Epub2015 Dec 11.  **Author information:** (1)a Departments of Clinical Virology ; (2)b Rural Unit for Health and Social Affairs (RUHSA) ; (3)c Internal Medicine ; (4)d Dermatology and Venereology , Christian Medical College , Vellore , India.  Viral load testing for human immunodeficiency virus 1 (HIV-1) in resource-poor settings continues to be a challenge. Although antiretroviral therapy (ART) is being made available in developing countries, monitoring of viral load is not being done on a regular basis. The purpose of this study was to assess the utility of Cavidi version 3.0, which measures the plasma reverse transcriptase (RT) activity and compare its performance with molecular HIV viral load assays. In all, 125 HIV-1 and 13 HIV-2 positive samples were analyzed. The overall sensitivity of the assay was 86.8% and 94.1% for viral load >1000 copies/mlmeasured by Qiagen Artus HIV-1 RG RT PCR and Abbott RealTime HIV-1 PCR assays, respectively. Compared with the routine molecular viral load assays, Cavidi version 3.0 is inexpensive, user-friendly, the expenditure on infrastructure is minimal, and it can be used for monitoring of both HIV types.  **DOI: 10.3109/23744235.2015.1122832** | **INTL** | **JUL TO DEC** | **PMID:**26654354 |
|  | Padhye KP(1), David KS(2), Dholakia SY(2), Mathew V(2), Murugan Y(2).  'Munchausen syndrome': a forgotten diagnosis in the spine.  Eur Spine J. 2016 May;25 Suppl 1:152-6. doi: 10.1007/s00586-015-4270-x. Epub 2015Oct 28.  **Author information:**  (1)Christian Medical College, Ida Scudder Road, Vellore, Tamil Nadu, 632004, India. kedarorth@gmail.com. (2)Christian Medical College, Ida Scudder Road, Vellore, Tamil Nadu, 632004, India.  PURPOSE: To present the case of a patient with Munchausen's syndrome who underwent multiple surgeries in the spine before the diagnosis was made and, therefore, to highlight the importance of this obscure condition that can result in unnecessary surgical treatment. METHODS: A 44-year-old businesswoman presented with multiple episodes of low back pain and weakness in both lower limbs over past 11 years. Past history consisted of multiple hospitalizations, and three surgeries on her lumbar spine at different hospitals, with dramatic improvement in symptoms being reported each time after surgery. Clinical examination showed inconsistent and nonspecific neurological findings. Imaging studies like X-rays, magnetic resonance imaging, and all neurophysiological studies were within normal limits. RESULTS: Multi-disciplinary evaluation by a team of orthopedicians, neurologist and psychiatrist and rehabilitation specialists diagnosed it as 'Munchausen syndrome'. Only one report of this fictitious disease in spine was found in review of literature (Association AP, Diagnostic and statistical manual of mental disorders: DSM-IV-TR(®), 2003). CONCLUSIONS: A history of multiple surgical interventions at multiple hospitals, often followed by dramatic improvement and then relapse, should trigger a suspicion of Munchausen syndrome, particularly in the scenario of normal imaging studies. Diagnosing this rare condition in spine is key to avoid unnecessary surgery. DOI: 10.1007/s00586-015-4270-x | **INTL** | **JAN TO JUN** | **PMID:**26510423 |
|  | Pal R, Mariappan I, Velayudhan SR.  Editorial: Induced Pluripotent Stem Cell-Derived Mesenchymal Stem Cells: Ushering of a New Era in Personalized Cell Therapies.  **Curr Stem Cell Res Ther. 2016;11(2):97-98.** | **INT** | **JAN TO JUN** | **PMID:**26592539 |
|  | Pallapati SC(1), Thomas BP(2), Anderson GA(1).  En bloc Excision and Matched Metatarsal Transfer for Expansive Benign OsteolyticLesions of the Metacarpal.  J Hand Surg Am. 2016 Nov;41(11):e417-e423. doi: 10.1016/j.jhsa.2016.08.004. Epub2016 Sep 7.  **Author information:**  (1)Paul Brand Centre for Hand Surgery, Christian Medical College & Hospital, Vellore, Tamil Nadu, India. (2)Paul Brand Centre for Hand Surgery, Christian Medical College & Hospital, Vellore, Tamil Nadu, India. Electronic address: binu@cmcvellore.ac.in.  PURPOSE: Benign aggressive expansile osteolytic lesions such as giant cell tumors and aneurysmal bone cysts involving the metacarpal head pose problems in management. Unacceptably high rates of recurrence are reported after curettage and bone grafting. An en bloc excision of such tumors ideally requires osteoarticular replacement of the excised metacarpal heads to retain mobility and function. We used nonvascularized metatarsal head and shaft harvested from the foot to replace the metacarpal defect after en bloc resection to retain movement and function of metacarpophalangeal (MCP) joint. The purpose of this study was to evaluate results of patients who underwent this procedure.  METHOD: Nine patients treated with metatarsal transfer for osteoarticular reconstruction after en bloc excision of benign aggressive osteolytic metacarpal head tumors were reviewed retrospectively. The postoperative evaluation included examination of radiographs, joint mobility, and patient rated return of function using the Michigan Hand Questionnaire.  RESULTS: Of 9 patients, 4 had aneurysmal bone cyst, 4 had giant cell tumor, and 1 an atypical cartilaginous lesion. Patients were aged between 14 and 45 years at the time of surgery. After an average of 44 months of follow-up (minimum follow-up of 24 months; range, 24-104 months), all patients had good postoperative function, satisfactory results, and no recurrence of tumor. The mean active range of motion at the reconstructed MCP joint was 75° (range, 0° to 90°). The Michigan Hand Questionnaire score averaged 80 (range, 69-92). No patient complained of donor site morbidity. One patient underwent MCP joint fusion after a pin tract infection.  CONCLUSIONS: Use of a matched metatarsal graft for osteoarticular reconstruction after en bloc excision of benign aggressive tumors involving the metacarpal head is a potential treatment option. In this limited series, consistent results with respect to functional range of motion at MCP joint, and without recurrence of tumor or notable donor site morbidity were obtained.  TYPE OF STUDY/LEVEL OF EVIDENCE: Therapeutic IV.  Copyright © 2016 American Society for Surgery of the Hand. Published by Elsevier Inc. All rights reserved.  DOI: 10.1016/j.jhsa.2016.08.004 | **INTL** | **JUL TO DEC** | **PMID:**27614921 |
|  | Pandian GR(1), Thampi SM(2), Chakraborty N(1), Kattula D(1), Kundavaram PP(1).  Profile and outcome of sudden cardiac arrests in the emergency department of atertiary care hospital in South India.  J Emerg Trauma Shock. 2016 Oct-Dec;9(4):139-145.  **Author information:**  (1)Department of Emergency Medicine, Christian Medical College, Vellore, Tamil Nadu, India. (2)Department of Anaesthesiology, Christian Medical College, Vellore, Tamil Nadu, India.  BACKGROUND: Sudden cardiac arrest (SCA) requiring cardiopulmonary resuscitation (CPR) is one of the common emergencies encountered in the emergency department (ED) of any hospital. Although several studies have reported the predictors of CPR outcome in general, there are limited data from the EDs in India.  MATERIALS AND METHODS: This retrospective study included all patients above 18 years with SCA who were resuscitated in the ED of a tertiary care hospital with an annual census of 60,000 patients between August 2014 and July 2015. A modified Utstein template was used for data collection. Factors relating to a sustained return of spontaneous circulation and mortality were analyzed using descriptive analytic statistics and logistic regressions.  RESULTS: The study cohort contained 254 patients, with a male predominance (64.6%). Median age was 55 (interquartile range: 42-64) years. Majority were in-hospital cardiac arrests (73.6%). Only 7.4% (5/67) of the out-of-hospital cardiac arrests received bystander resuscitation before ED arrival. The initial documented rhythm was pulseless electrical activity (PEA)/asystole in the majority (76%) of cases while shockable rhythms pulseless ventricular tachycardia/ventricular fibrillation were noted in only 8% (21/254) of cases. Overall ED-SCA survival to hospital admission was 29.5% and survival to discharge was 9.9%. Multivariate logistic regression analysis showed age ≥65 years (odds ratio [OR]: 12.33; 95% confidence interval [CI]: 1.38-109.59; P = 0.02) and total duration of CPR >10 min (OR: 5.42; 95% CI: 1.15-25.5; P = 0.03) to be independent predictors of mortality.  CONCLUSION: SCA in the ED is being increasingly seen in younger age groups. Despite advances in resuscitation medicine, survival rates of both in-hospital and out-of-hospital SCA remain poor. There exists a great need for improving prehospital care as well as control of risk factors to decrease the incidence and improve the outcome of SCA.  DOI: 10.4103/0974-2700.193348 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5113080  **PMID:**27904259 |
|  | Pandian RM(1), John NT(1), Eapen A(2), Antonisamy B(3), Devasia A(1), Kekre N(1).  Does MRI help in the pre - operative evaluation of pelvic fracture urethraldistraction defect? - A pilot study.  Int Braz J Urol. 2016 Nov 2;42. doi: 10.1590/S1677-5538.IBJU.2016.0252. [Epubahead of print]  **Author information:**  (1)Department of Urology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. (2)Department of Radiology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. (3)Department of Biostatistics, Christian Medical College and Hospital, Tamil Nadu, India.  OBJECTIVES: To study the usefulness of MRI in preoperative evaluation of PFUDD. Can MRI provide additional information on urethral distraction defect (UDD) and cause of erectile dysfunction (ED)?  MATERIALS AND METHODS: In this prospective study, consecutive male patients presenting with PFUDD were included from Feb 2011 till Dec 2012. Those with traumatic spinal cord injury and pre-existing ED were excluded. Patients were assessed using IIEF questionnaire, retrograde urethrogram and micturating cystourethrogram (RGU+MCU) and MRI pelvis. Primary end point was erectile function and secondary end point was surgical outcome.  RESULTS: Twenty patients were included in this study. Fourteen patients (70%) were ≤40years; fifteen patients (75%) had ED, seven patients (35%) had severe ED. MRI findings associated with ED were longer median UDD (23mm vs. 15mm, p=0.07), cavernosal injury (100%, p=0.53), rectal injury (100%, p=0.53), retropubic scarring (60%, p=0.62) and prostatic displacement (60%, p=0.99). Twelve patients (60%) had a good surgical outcome, five (25%) had an acceptable outcome, three (15%) had a poor outcome. Poor surgical outcome was associated with rectal injury (66.7%, p=0.08), cavernosal injury (25%, p=0.19), retropubic scarring (18.1%, p=0.99) and prostatic displacement (16.7%, p=0.99). Five patients with normal erections had good surgical outcome. Three patients with ED had poor outcome (20%, p=0.20).  CONCLUSIONS: MRI did not offer significant advantage over MCU in the subgroup of men with normal erections. Cavernosal injury noted on MRI strongly correlated with ED. Role of MRI may be limited to the subgroup with ED or an inconclusive MCU.  Copyright® by the International Brazilian Journal of Urology. | **INTL** | **JUL TO DEC** | **PMID:**27819749 |
|  | Paramanandam M(1), O'Byrne M(2), Ghosh B(3), Mammen JJ(4), Manipadam MT(5),Thamburaj R(1), Pakrashi V(2).  Automated Segmentation of Nuclei in Breast Cancer Histopathology Images.  PLoS One. 2016 Sep 20;11(9):e0162053. doi: 10.1371/journal.pone.0162053.eCollection 2016.  **Author information:**  (1)Department of Mathematics, Madras Christian College, Chennai, India. (2)School of Mechanical and Materials Engineering, University College Dublin, Ireland. (3)Department of Civil, Structural and Environmental Engineering, Trinity College Dublin, Ireland. (4)Department of Transfusion Medicine & Immunohematology, Christian Medical College, Vellore, India. (5)Department of Pathology, Christian Medical College, Vellore, India.  The process of Nuclei detection in high-grade breast cancer images is quite challenging in the case of image processing techniques due to certain heterogeneous characteristics of cancer nuclei such as enlarged and irregularly shaped nuclei, highly coarse chromatin marginalized to the nuclei periphery and visible nucleoli. Recent reviews state that existing techniques show appreciable segmentation accuracy on breast histopathology images whose nuclei are dispersed and regular in texture and shape; however, typical cancer nuclei are often clustered and have irregular texture and shape properties. This paper proposes a novel segmentation algorithm for detecting individual nuclei from Hematoxylin and Eosin (H&E) stained breast histopathology images. This detection framework estimates a nuclei saliency map using tensor voting followed by boundary extraction of the nuclei on the saliency map using a Loopy Back Propagation (LBP) algorithm on a Markov Random Field (MRF). The method was tested on both whole-slide images and frames of breast cancer histopathology images. Experimental results demonstrate high segmentation performance with efficient precision, recall and dice-coefficient rates, upon testing high-grade breast cancer images containing several thousand nuclei. In addition to the optimal performance on the highly complex images presented in this paper, this method also gave appreciable results in comparison with two recently published methods-Wienert et al. (2012) and Veta et al. (2013), which were tested using their own datasets.  DOI: 10.1371/journal.pone.0162053 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5029866  **PMID:**27649496 |
|  | Parameswaran A(1), Krishnamoorthy VP(1), Oommen AT(1), Jasper A(2), Korula RJ(1), Nair SC(3), Poonnoose PM(1).  Is pre-operative assessment of coagulation profile with Thrombelastography (TEG) useful in predicting venous thromboembolism (VTE) following orthopaedic surgery?  J Clin Orthop Trauma. 2016 Oct-Dec;7(Suppl 2):225-229. doi: 10.1016/j.jcot.2016.08.003. Epub 2016 Aug 24.  **Author information:**  (1)Department of Orthopaedics-Unit II, Christian Medical College, Vellore 632004, Tamil Nadu, India. (2)Department of Radiology, Christian Medical College, Vellore 632004, Tamil Nadu, India. (3)Department of Transfusion Medicine and Immunohaematology, Christian Medical College, Vellore 632004, Tamil Nadu, India.  INTRODUCTION: Epidemiologic data on the incidence of venous thromboembolism (VTE) in Indian population vary widely. Most studies show that the incidence of VTE is lower in Asian patients than in Western population. Screening tools to identify high-risk patients should enable us to reduce this complication. METHODS: The incidence of VTE in 101 patients who underwent knee or hip arthroplasty, or surgery for hip fractures, without chemoprophylaxis for deep vein thrombosis (DVT) was documented. Diagnosis of DVT was made with Duplex ultrasonography. We also assessed the usefulness of pre-operative assessment of the hypercoagulable status of the patient in predicting the occurrence of VTE, using the Thrombelastography (TEG) test. RESULTS: The incidence of DVT in the study population was 7%. Six of the 7 patients who developed DVT had surgery for hip fractures, while one had knee replacement. The thrombus was above the knee joint level in 6 of the 7 patients. Pre-operative TEG was positive in only one of the 7 patients, but was positive in 37 of the remaining 94 patients. CONCLUSION: Incidence of DVT in the study population is sufficiently high to recommend some form of prophylaxis to prevent VTE following hip and knee surgery. Pre-operative assessment of the patients' coagulation status with Thrombelastography does not predict the risk of VTE. The use of other lab parameters that could help in selective chemoprophylaxis needs to be explored.  DOI: 10.1016/j.jcot.2016.08.003 | **INT** | **JUL TO DEC** | PMID: 28053389 PMCID: PMC5197038 |
|  | Pasquini MC(1), Zhang MJ(2), Medeiros BC(3), Armand P(4), Hu ZH(5), NishihoriT(6), Aljurf MD(7), Akpek G(8), Cahn JY(9), Cairo MS(10), Cerny J(11), CopelanEA(12), Deol A(13), Freytes CO(14), Gale RP(15), Ganguly S(16), George B(17),Gupta V(18), Hale GA(19), Kamble RT(20), Klumpp TR(21), Lazarus HM(22), LugerSM(23), Liesveld JL(24), Litzow MR(25), Marks DI(26), Martino R(27), NorkinM(28), Olsson RF(29), Oran B(30), Pawarode A(31), Pulsipher MA(32), RamanathanM(11), Reshef R(23), Saad AA(33), Saber W(5), Savani BN(34), Schouten HC(35),Ringdén O(36), Tallman MS(37), Uy GL(38), Wood WA Jr(39), Wirk B(40), PérezWS(5), Batiwalla M(41), Weisdorf DJ(42).  Hematopoietic Cell Transplantation Outcomes in Monosomal Karyotype MyeloidMalignancies.  Biol Blood Marrow Transplant. 2016 Feb;22(2):248-57. doi:10.1016/j.bbmt.2015.08.024. Epub 2015 Aug 29.  **Author information:**  (1)Center for International Blood and Marrow Transplant Research, Department of Medicine, Medical College of Wisconsin, Milwaukee, Wisconsin. Electronic address: mpasquini@mcw.edu. (2)Center for International Blood and Marrow Transplant Research, Department of Medicine, Medical College of Wisconsin, Milwaukee, Wisconsin; Division of Biostatistics, Institute for Health and Society, Medical College of Wisconsin, Milwaukee, Wisconsin. (3)Department of Hematology, Stanford University School of Medicine, Stanford, California. (4)Department of Medical Oncology/Hematologic Malignancies, Dana-Farber Cancer Institute, Boston, Massachusetts. (5)Center for International Blood and Marrow Transplant Research, Department of Medicine, Medical College of Wisconsin, Milwaukee, Wisconsin. (6)Department of Blood and Marrow Transplantation, H. Lee Moffitt Cancer Center and Research Institute, Tampa, Florida. (7)Department of Oncology, King Faisal Specialist Hospital Center and Research, Riyadh, Saudi Arabia. (8)Stem Cell Transplantation and Cellular Therapy Program, Banner MD Anderson Cancer Center, Gilbert, Arizona. (9)Department of Hematology, University Hospital, Grenoble, France. (10)Division of Pediatric Hematology, Oncology and Stem Cell Transplantation, Department of Pediatrics, New York Medical College, Valhalla, New York. (11)Department of Medicine, UMass Memorial Medical Center, Worcester, Massachusetts. (12)Department of Hematologic Oncology and Blood Disorders, Levine Cancer Institute, Carolinas HealthCare System, Charlotte, North Carolina. (13)Department of Oncology, Karmanos Cancer Institute, Wayne State University, Detroit, Michigan. (14)Division of Hematology & Oncology, South Texas Veterans Health Care System and University of Texas Health Science Center San Antonio, San Antonio, Texas. (15)Hematology Research Centre, Division of Experimental Medicine, Department of Medicine, Imperial College London, London, United Kingdom. (16)Blood and Marrow Transplantation, Division of Hematology and Oncology, University of Kansas Medical Center, Kansas City, Kansas. (17)Department of Haematology, Christian Medical College, Vellore, India. (18)Blood and Marrow Transplant Program, Princess Margaret Cancer Centre, University Health Network, Toronto, Ontario, Canada. (19)Department of Hematology/Oncology, All Children's Hospital, St. Petersburg, Florida. (20)Division of Hematology and Oncology, Center for Cell and Gene Therapy, Baylor College of Medicine, Houston, Texas. (21)Department of Medical Oncology, Thomas Jefferson University Hospital, Philadelphia, Pennsylvania. (22)Seidman Cancer Center, University Hospitals Case Medical Center, Cleveland, Ohio. (23)Department of Medicine, Abramson Cancer Center, University of Pennsylvania Medical Center, Philadelphia, Pennsylvania. (24)Department of Medicine, University of Rochester Medical Center, Rochester, New York. (25)Division of Hematology and Transplant Center, Mayo Clinic, Rochester, Minnesota. (26)Pediatric Bone Marrow Transplant, University Hospitals Bristol NHS Trust, Bristol, United Kingdom. (27)Division of Clinical Hematology, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain. (28)Division of Hematology/Oncology, University of Florida College of Medicine, Gainesville, Florida. (29)Division of Therapeutic Immunology, Department of Laboratory Medicine, Karolinska Institutet, Stockholm, Sweden; Centre for Clinical Research Sörmland, Uppsala University, Uppsala, Sweden. (30)Division of Cancer Medicine, Department of Stem Cell Transplantation, The University of Texas MD Anderson Cancer Center, Houston, Texas. (31)Department of Internal Medicine, University of Michigan, Ann Arbor, Michigan. (32)Division of Hematology, Oncology, and Blood and Marrow Transplantation, Children's Hospital Los Angeles, University of Southern California Keck School of Medicine, Los Angeles, California. (33)Division of Hematology/Oncology, Department of Medicine, University of Alabama at Birmingham, Birmingham, Alabama. (34)Division of Hematology/Oncology, Department of Medicine, Vanderbilt University Medical Center, Nashville, Tennessee. (35)Department of Hematology, Academische Ziekenhuis, Maastricht, Netherlands. (36)Division of Therapeutic Immunology,Department of Laboratory Medicine, Karolinska Institutet, Stockholm, Sweden; Centre for Allogeneic Stem Cell Transplantation, Stockholm, Sweden. (37)Leukemia Service, Department of Medicine, Memorial Sloan Kettering Cancer Center, New York, New York. (38)Division of Oncology, Washington University School of Medicine, St. Louis, Missouri. (39)Division of Hematology/Oncology, Department of Medicine, University of North Carolina, Chapel Hill, North Carolina. (40)Division of Bone Marrow Transplant, Seattle Cancer Care Alliance, Seattle, Washington. (41)Hematology Branch, National Heart Lung and Blood Institute – National Institutes of Health, Bethesda, Maryland. (42)Division of Hematology, Oncology and Transplantation, Department of Medicine, University of Minnesota Medical Center, Minneapolis, Minnesota.  **Comment in**  Biol Blood Marrow Transplant. 2016 Feb;22(2):191-2.  The presence of monosomal karyotype (MK+) in acute myeloid leukemia (AML) is associated with dismal outcomes. We evaluated the impact of MK+ in AML (MK+AML, n = 240) and in myelodysplastic syndrome (MDS) (MK+MDS, n = 221) on hematopoietic cell transplantation outcomes compared with other cytogenetically defined groups (AML, n = 3360; MDS, n = 1373) as reported to the Center for International Blood and Marrow Transplant Research from 1998 to 2011. MK+ AML was associated with higher disease relapse (hazard ratio, 1.98; P < .01), similar transplantation-related mortality (TRM) (hazard ratio, 1.01; P = .90), and worse survival (hazard ratio, 1.67; P < .01) compared with those outcomes for other cytogenetically defined AML. Among patients with MDS, MK+ MDS was associated with higher disease relapse (hazard ratio, 2.39; P < .01), higher TRM (hazard ratio, 1.80; P < .01), and worse survival (HR, 2.02; P < .01). Subset analyses comparing chromosome 7 abnormalities (del7/7q) with or without MK+ demonstrated higher mortality for MK+ disease in for both AML (hazard ratio, 1.72; P < .01) and MDS (hazard ratio, 1.79; P < .01). The strong negative impact of MK+ in myeloid malignancies was observed in all age groups and using either myeloablative or reduced-intensity conditioning regimens. Alternative approaches to mitigate disease relapse in this population are needed.Copyright © 2016 American Society for Blood and Marrow Transplantation. Published by Elsevier Inc. All rights reserved. DOI: 10.1016/j.bbmt.2015.08.024 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4716890  **PMID:**26327629 |
|  | Paul P(1), Kuriakose T(1), John J(2), Raju R(1), George K(2), Amritanand A(1),Doss PA(1), Muliyil J(2).  Prevalence and Visual Outcomes of Cataract Surgery in Rural South India: ACross-Sectional Study.  Ophthalmic Epidemiol. 2016 Oct;23(5):309-15. doi: 10.1080/09286586.2016.1212991.Epub 2016 Aug 23.  **Author information:**  (1)a Department of Ophthalmology , Christian Medical College , Vellore , India. (2)b Department of Community Health , Christian Medical College , Vellore , India.  PURPOSE: To determine the prevalence of cataract surgery and postoperative vision-related outcomes, especially with respect to sex, socioeconomic status (SES) and site of first contact with eye care, in a rural area of South India. METHODS: In a population-based cross-sectional survey of 5530 individuals aged 50 years or older from 10 villages selected by cluster sampling, individuals who had undergone cataract surgery in one or both eyes were identified. Consenting participants were administered a questionnaire, underwent vision assessment and ophthalmic examination. Outcomes were classified as good if visual acuity of the operated eye was 6/18 or better, fair if worse than 6/18 but better than or equal to 6/60, and poor if worse than 6/60.  RESULTS: Prevalence of cataract surgery in this age group (771 persons) was 13.9% (95% confidence interval, CI, 13.0-14.9%). In the 1112 eyes of 749 persons studied, at presentation, 53.1% (95% CI 50.1-56.1%) of operated eyes had good, 38.1% (95% CI 35.2-41.0%) had fair, and 8.8% (95% CI 7.1-10.5%) had poor outcomes. With pinhole, 75.2% (95% CI 72.6-77.8%) had good, 17.2% (95% CI 14.9-19.5%) had fair, and 7.4% (95% CI 5.8-9.0%) had poor outcomes. In 76.3% of eyes with fair and poor presenting outcomes we detected an avoidable cause for the suboptimal visual acuity. Place of surgery and duration since surgery of 3 years or more were risk factors for blindness, while SES, sex and site of first eye care contact were not.  CONCLUSION: The high prevalence of avoidable causes of visual impairment in this rural setting indicates the scope for preventive strategies.  DOI: 10.1080/09286586.2016.1212991 | **INTL** | **JUL TO DEC** | **PMID:**27552313 |
|  | Peedicayil J(1).  Epigenetic targets for the treatment of neurodegenerative diseases.  Clin Pharmacol Ther. 2016 May;99(5):481. doi: 10.1002/cpt.323. Epub 2016 Jan 12.  **Author information:**  (1)Department of Pharmacology and Clinical Pharmacology, Christian Medical College, Vellore, 632 002, India.  **Comment on**  Clin Pharmacol Ther. 2015 Nov;98(5):492-501.  DOI: 10.1002/cpt.323 | **INTL** | **JAN TO JUN** | **PMID:**26669276 |
|  | Peedicayil J(1).  Preclinical epigenetic models for screening epigenetic drugs for schizophrenia.  J Pharmacol Toxicol Methods. 2016 Jan-Feb;77:1-5. doi:10.1016/j.vascn.2015.09.002. Epub 2015 Sep 11.  **Author information:**  (1)Department of Pharmacology and Clinical Pharmacology, Christian Medical College, Vellore, India. Electronic address: [jpeedi@cmcvellore.ac.in](mailto:jpeedi@cmcvellore.ac.in)  Schizophrenia is an important psychiatric disorder for which effective drugs are available. However, there are problems with current drug therapy of schizophrenia in that some patients do not respond adequately. Moreover, some patients show treatment resistance and some patients show cognitive decline despite treatment. Hence new and effective drugs will be useful for the treatment of this disorder. Since there is increasing evidence that epigenetic mechanisms of gene expression are defective in schizophrenia, drugs that correct epigenetic defects, epigenetic drugs, could be useful in the treatment of this disorder. This paper discusses preclinical epigenetic models for screening epigenetic drugs for schizophrenia. It also discusses how such models could be useful for the discovery and development of such drugs. Copyright © 2015 Elsevier Inc. All rights reserved. DOI: 10.1016/j.vascn.2015.09.002 | **INTL** | **JAN TO JUN** | **PMID:**26370661 |
|  | Peedicayil J(1).  Epigenetic Drugs for Multiple Sclerosis.  Curr Neuropharmacol. 2016;14(1):3-9.  **Author information:**  (1)Department of Pharmacology and Clinical Pharmacology Christian Medical College Vellore India. jpeedi@cmcvellore.ac.in.  There is increasing evidence that abnormalities in epigenetic mechanisms of gene expression contribute to the development of multiple sclerosis (MS). Advances in epigenetics have given rise to a new class of drugs, epigenetic drugs. Although many classes of epigenetic drugs are being investigated, at present most attention is being paid to two classes of epigenetic drugs: drugs that inhibit DNA methyltransferase (DNMTi) and drugs that inhibit histone deacetylase (HDACi). This paper discusses the potential use of epigenetic drugs in the treatment of MS, focusing on DNMTi and HDACi. Preclinical drug trials of DNMTi and HDACi for the treatment of MS are showing promising results. Epigenetic drugs could improve the clinical management of patients with MS. | **INTL** | **JAN TO JUN** | **PMCID: PMC**4787283  **PMID:**26813117 |
|  | Peedicayil J(1).  The role of epigenetics in social psychiatry.  Int J Soc Psychiatry. 2016 Nov 16. pii: 0020764016677556. [Epub ahead of print]  **Author information:**  (1)Department of Pharmacology and Clinical Pharmacology, Christian Medical College Vellore, Vellore, India jpeedi@cmcvellore.ac.in.  BACKGROUND: Epigenetics refers to the study of heritable changes in gene expression not involving changes in DNA sequence and is presently an active area of research in biology and medicine. There is increasing evidence that epigenetics is involved in the pathogenesis of psychiatric disorders.  AIMS AND METHODS: Several studies conducted to date have suggested that psychosocial factors act by modifying epigenetic mechanisms of gene expression in the brain in the pathogenesis of psychiatric disorders. Such studies have been conducted both on brain tissues and also using peripheral tissues as substitutes for brain tissues. This article reviews such studies.  RESULTS AND CONCLUSION: Epigenetic mechanisms of gene expression in the brain appear to link one individual with another in the context of social psychiatry. Epigenetics appears to be of major importance to the field of social psychiatry.  © The Author(s) 2016.  DOI: 10.1177/0020764016677556 | **INTL** | **JUL TO DEC** | **PMID:**27856950 |
|  | Peter JV(1), Varghese GH, Alexander H, Tom NR, Swethalekshmi V, Truman C, KumarTR, Sivakumar T.  Patterns of Adverse Drug Reaction in the Medical Wards of a Teaching Hospital: AProspective Observational Cohort Study.  Curr Drug Saf. 2016;11(2):164-71.  **Author information:**  (1)Christian Medical College Hospital, Vellore 632 004, India. [peterjohnvictor@yahoo.com.au](mailto:peterjohnvictor@yahoo.com.au).  INTRODUCTION: According to the World Health Organization (WHO) definition, an Adverse Drug Reaction (ADR) is a response to a drug that is noxious and unintended and occurs at doses normally used in humans for the prophylaxis, diagnosis, and treatment of disease. The risk factors of ADR are multi-factorial and include poly-pharmacy, age, gender, race, genetics and inter-current disease. PATIENTS AND METHODS: This was a hospital based, prospective, observational cohort study undertaken in a tertiary care hospital in south India to assess the different patterns of adverse drug reaction in medical wards over 6 months. The severity of ADR was assessed using Hartwig Siegel scale and causality by Naranjo and WHO UMC Scale. Preventability was assessed using Schumock and Thornton scale and other parameters such as incidence, onset, duration, management and outcome were also assessed. Risk factors were assessed by bi-variate logistic regression analysis and length of hospital stay by T test. RESULTS: The incidence of ADR was 10.42% in medicine wards. The causality of ADR done by Naranjo scale showed that most of the ADRs were probable (7.38%). Anti-tubercular agents were the leading cause of ADR. Duration of hospitalization was significantly longer (7.18 ± 2.64 vs. 5.06 ± 2.13 days) in patients with ADR (Odds ratio 1.38, 95% Confidence interval 1.26 to 1.51). 7.28% of ADRs were moderately severe. Seriousness criteria assessment showed that 0.33% were serious reactions. Most of the ADRs were definitely preventable. Most of the ADRs were managed by discontinuing the suspected drug. The present study showed female gender predominance over males for ADRs and no relationship with age. CONCLUSION: Adverse drug reactions impose significant burden on hospitals through prolonging patient stay and by increasing admission rates. The occurrence of ADR in this study was higher when compared to that reported in previous studies. This study highlights the importance of ADR reporting among ADR reporting among health care professionals in hospital. | **INTL** | **JAN TO JUN** | **PMID:**26916785 |
|  | Philip C(1), George B(1), Korula A(1), Srivastava A(1), Balasubramanian P(1),Mathews V(2).  Treatment rates of paediatric acute myeloid leukaemia: a view from three tertiarycentres in India - response to Gupta et al.  Br J Haematol. 2016 Oct;175(2):347-349. doi: 10.1111/bjh.13857. Epub 2015 Dec 2.  **Author information:**  (1)Department of Haematology, Christian Medical College, Vellore, India. (2)Department of Haematology, Christian Medical College, Vellore, India. vikram@cmcvellore.ac.in.  DOI: 10.1111/bjh.13857 | **INTL** | **JUL TO DEC** | **PMID:**26627639 |
|  | Philip SS(1), Mani SE(2), Dutton GN(3).  Pediatric Balint's Syndrome Variant: A Possible Diagnosis in Children.  Case Rep Ophthalmol Med. 2016;2016:3806056. Epub 2016 Nov 8.  **Author information:**  (1)Department of Ophthalmology, The Cerebral Visual Impairment Clinic, Christian Medical College and Hospital, Vellore, Tamil Nadu 632001, India. (2)Department of Radiodiagnosis, Christian Medical College, Vellore, Tamil Nadu, India. (3)Department of Vision Sciences, Glasgow Caledonian University, Cowcaddens Road, Glasgow G4 0BA, UK.  Balint's syndrome is well described in adults, but not in children. It is caused by bilateral posterior parietal lobe damage and comprises a triad of simultanagnosia (inability to simultaneously see more than a small number of items), optic ataxia (impaired visual guidance of movement of the limbs and body), and apraxia of gaze (inability to volitionally direct gaze despite the requisite motor substrate) often associated with homonymous lower visual field loss. We, here, describe five children (four males, one female; mean age 7.4 years, [range 4-11 years]; birth weight ≤ 2.5 kg; four were born ≤ 36 weeks of gestational age and one at 40 weeks) who presented to the Cerebral Visual Impairment Clinic at a tertiary care center in South India with clinical features remarkably consistent with the above description. In all children neuroimaging showed bilateral parietooccipital gliosis with regional white matter volume loss and focal callosal thinning, consistent with perinatal hypoxic ischemic encephalopathy and possible neonatal hypoglycemia.  DOI: 10.1155/2016/3806056 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5118514  **PMID:**27895948 |
|  | Pillai R, Ancheri SA, Dharmalingam SK, Sahajanandan R(1).  An innovative way to reinsert dislodged Arndt blocker using urological glidewire.  Ann Card Anaesth. 2016 Apr-Jun;19(2):354-6. doi: 10.4103/0971-9784.179617.  **Author information:**  (1)Department of Anaesthesia, Christian Medical College, Vellore, Tamil Nadu, India.  The Arndt blocker is positioned in the desired bronchus using a wire loop which couples the blocker with a fiberoptic bronchoscope (FOB). The wire loop once removed cannot be reinserted in 5F and 7F blockers making repositioning of the blocker difficult. A 34-year-old female was to undergo left thoracotomy followed by laparoscopic cholecystectomy. The left lung was isolated with a 7F Arndt bronchial blocker. During one-lung ventilation, the wire loop was removed for oxygen insufflation. There was loss of lung isolation during the procedure and dislodgement of the blocker was confirmed by FOB. The initial attempts to reintroduce the blocker into the left main bronchus failed. An alternative technique using a glide wire was attempted which resulted in successful reintroduction of the Arndt blocker. The 0.032 inch zebra glide wire may be effectively used to reposition a dislodged Arndt blocker if the wire loop has been removed. DOI: 10.4103/0971-9784.179617 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4900362  **PMID:**27052085 |
|  | PonMalar J(1), Benjamin SJ(1), Abraham A(1), Rathore S(1), Jeyaseelan V(2),Mathews JE(3).  Randomized double-blind placebo controlled study of preinduction cervical primingwith 25 µg of misoprostol in the outpatient setting to prevent formal inductionof labour.  Arch Gynecol Obstet. 2016 Aug 26. [Epub ahead of print]  **Author information:**  (1)Department of Obstetrics and Gynaecology Unit V, Christian Medical College, Ida Scudder Road, Vellore, 632 004, India. (2)Department of Biostatistics, Christian Medical College, Ida Scudder Road, Vellore, 632 004, India. (3)Department of Obstetrics and Gynaecology Unit V, Christian Medical College, Ida Scudder Road, Vellore, 632 004, India. coronistrial@yahoo.co.in.  OBJECTIVE: To compare the efficacy of preinduction outpatient use of a single dose of 25 μg vaginal misoprostol between 38(1/2) and 40 weeks with that of placebo, to decrease the interval from intervention to delivery after stretch and sweep in low-risk gravid women with Bishop's score <4.  METHOD: Sixty three women received 25 μg vaginal misoprostol and 63 women received placebo after stretch and sweep.  RESULTS: The duration from intervention to delivery was 3.35 (1.12-9.46) days in the misoprostol group and 5.42 (2.39-10.11) days in the placebo group which was statistically significant (p = 0.029). Spontaneous labor was seen in 39 women (61.9 %) in the misoprostol group and 35 women (55.6 %) in the placebo group (p = 0.531). Eight women in the misoprostol group and 18 in the placebo group had Lower Segment Caesarean Section (LSCS) and this difference was also statistically significant (p = 0.027). There were no major maternal and neonatal complications in both groups.  CONCLUSION: Preinduction use of 25 μg vaginal misoprostol after stretch and sweep in the outpatient setting decreased the intervention to delivery interval when compared to placebo.  DOI: 10.1007/s00404-016-4173-z | **INTL** | **JUL TO DEC** | **PMID:**27566696 |
|  | Poonnoose PM(1), Hilliard P(2), Doria AS(3), Keshava SN(4), Gibikote S(4),Kavitha ML(5), Feldman BM(6), Blanchette V(7), Srivastava A(5).  Correlating clinical and radiological assessment of joints in haemophilia:results of a cross sectional study.  Haemophilia. 2016 Nov;22(6):925-933. doi: 10.1111/hae.13023. Epub 2016 Jul 7.  **Author information:**  (1)Department of Orthopaedics, Christian Medical College, Vellore, India. (2)Department of Rehabilitation, The Hospital for Sick Children, Toronto, ON, Canada. (3)Department of Diagnostic Imaging, The Hospital for Sick Children, Toronto, ON, Canada. (4)Department of Radiology Christian Medical College, Vellore, India. (5)Department of Haematology, Christian Medical College, Vellore, India. (6)Division of Rheumatology, Departments of Paediatrics, The Hospital for Sick Children, Institute of Health Policy, Management and Evaluation, University of Toronto, Toronto, ON, Canada. (7)Division of Haematology/Oncology, Department of Paediatrics, The Hospital for Sick Children, University of Toronto, Toronto, ON, Canada.  OBJECTIVES: This study was undertaken to determine the correlation between the radiological changes in haemophilic arthropathy [X-ray, Ultrasound (US) and MRI] and clinical assessment as determined by the Hemophilia Joint Health Score (HJHS); and to document the US and MRI changes in joints that appear normal on plain X-ray and clinical evaluation.  MATERIALS AND METHODS: Of 55 study joints (22 knees and 33 ankles) in 51 patients with haemophilia/von Willebrand disease, with a median age of 15 years (range: 5-17) were assessed using X-rays (Pettersson score) and clinical examination (HJHS) at two centres (Toronto, Canada; Vellore, India). MRI and ultrasonographic scoring was done through a consensus assessment by imagers at both centres using the IPSG MRI and US scores.  RESULTS: The HJHS had a good correlation with the Pettersson score (rs = 0.66). Though the HJHS had moderate correlation with the osteochondral component of the MRI and US scores (rs 0.51, 0.45 respectively), its correlation with the soft tissue component was poor (rs 0.19; 0.26 respectively). Of the 18 joints with a Pettersson score of zero, 88.9% had changes that were detected clinically by the HJHS. Osteochondral abnormalities were identified in 38.9% of these joints by the MRI, while US images of the same joints were deemed abnormal in 83.3% by the current criteria. US identified haemosiderin and other soft tissue changes in all of the joints, while the same changes were noted in 94.4% of these joints on MRI. There were four joints with a HJHS of zero, all of which had soft tissue changes on MRI (score 1-7) and US (score 2-7). Osteochondral changes were detected in three of these joints by US and in 2 by MRI. There were four joints with an MRI score of 0-1 that had significant US scores (3-5) and HJHS scores (0-6).  CONCLUSION: US and MRI are able to identify pathological changes in joints with normal X-ray imaging and clinical examination. However, further studies are required to be able to differentiate early abnormalities from normal. Clinical (HJHS) and radiological assessment (US/MRI) provide complimentary information and should be considered conjointly in the assessment of early joint arthropathy.  © 2016 John Wiley & Sons Ltd.  DOI: 10.1111/hae.13023 | **INTL** | **JUL TO DEC** | **PMID:**27385495 |
|  | Prabhakar AT(1), Kamanahalli R(2), Sivadasan A(3), Joseph E(2), Viggeswarpu S(4).  Non-fatal acute haemorrhagic leukoencephalitis following snake bite: A casereport.  Trop Doct. 2016 Jan;46(1):57-9. doi: 10.1177/0049475515577987. Epub 2015 Mar 18.  **Author information:**  (1)Department of Neurological Sciences, Christian Medical College, Vellore, India atprabhakar@gmail.com. (2)Department of Radiodiagnosis, Christian Medical College, Vellore, India. (3)Department of Neurological Sciences, Christian Medical College, Vellore, India. (4)Department of Geriatrics, Christian Medical College, Vellore, India.  Acute haemorrhagic leukoencephalitis (AHL) is a fulminant inflammatory disease of cerebral white matter, characterised by demyelination and haemorrhagic necrosis. The outcome is usually fatal with only few survivors. An unusual presentation of a 44-year-old South Indian farmer who developed AHL following a snake bite is reported. Though the initial brain imaging showed extensive involvement of the white matter with multiple haemorrhagic foci, the patient improved spontaneously with no specific therapy. A repeat magnetic resonance imaging of the brain 28 days after the snake bite confirmed radiological improvement. © The Author(s) 2015. DOI: 10.1177/0049475515577987 | **INTL** | **JAN TO JUN** | **PMID:**25790820 |
|  | Prabhu VV(1), Sathyamurthy D(1), Ramasamy A(1), Das S(2), Anuradha M(1),Pachiappan S(1).  Evaluation of protective effects of diosmin (a citrus flavonoid) inchemical-induced urolithiasis in experimental rats.  Pharm Biol. 2016 Sep;54(9):1513-21. doi: 10.3109/13880209.2015.1107105. Epub 2016Jan 22.  **Author information:**  (1)a Department of Pharmacology , Swamy Vivekanandha College of Pharmacy , Namakkal , Tamil Nadu , India ; (2)b Department of Pharmacology , Christian Medical College , Vellore , Tamil Nadu , India.  Context There have not been any conclusive studies of the effects of diosmin, a modified flavanone glycoside obtained from Teucrium gnaphalodes L'Her (Lamiaceae), on urolithiasis. Objective To evaluate anti-urolithiatic effects of diosmin in ammonium chloride and ethylene glycol-induced renal stone in experimental animals. Materials and methods Thirty Sprague-Dawley were divided into five groups (n=6) receiving the following treatments, respectively, p.o. for 15 consecutive days: distilled water, 0.75% v/v ethylene glycol + 2% w/v ammonium chloride, 0.75% v/v ethylene glycol + 2% w/v ammonium chloride + cystone® 750 mg/kg, 0.75% v/v ethylene glycol + 2% w/v ammonium chloride + diosmin 10 mg/kg or 0.75% v/v ethylene glycol + 2% w/v ammonium chloride + diosmin 20 mg/kg. Different biomarkers of urolithiasis in urine and serum were evaluated and histopathological examination of kidney was done. Results Animals treated with diosmin (both 10 and 20 mg/kg) had significantly (p < 0.005) decreased in kidney weight, urinary pH, total urinary protein, urinary calcium, phosphorus, serum potassium, sodium, magnesium, creatinine, uric acid and blood urea nitrogen levels and significantly (p < 0.005) increased in urinary volume, urinary magnesium, potassium, sodium, creatinine, uric acid and serum calcium levels in comparison to animals treated with ethylene glycol and ammonium chloride. However, results were better with diosmin 20 mg/kg in comparison to the control group. Conclusion Diosmin (10 and 20 mg/kg) has very good anti-urolithiatic activity similar to the standard drug cystone®.  DOI: 10.3109/13880209.2015.1107105 | **INTL** | **JUL TO DEC** | **PMID:**26799954 |
|  | Pradhan ZS(1), Braganza A, Abraham LM.  Does the ISNT Rule Apply to the Retinal Nerve Fiber Layer?  J Glaucoma. 2016 Jan;25(1):e1-4. doi: 10.1097/IJG.0000000000000064.  **Author information:**  (1)Christian Medical College, Vellore, Tamil Nadu, India.  PURPOSE: To determine whether the ISNT rule (Inferior>Superior>Nasal>Temporal) or the "IST" rule (Inferior>Superior>Temporal) can be applied to the peripapillary retinal nerve fiber layer (RNFL) thickness as measured using Heidelberg Retinal Tomography (HRT) and Optical Coherence Tomography (OCT). MATERIALS AND METHODS: This was a cross-sectional study of 189 normal and 42 glaucomatous eyes. RNFL thicknesses measured in different quadrants using HRT and OCT were compared to determine the percentage of eyes obeying the ISNT and IST rule. RESULTS: The HRT-measured mean RNFL thickness in normal eyes showed that 25.9% obeyed the ISNT rule and 70.4% conformed to the "IST" rule. The "IST" rule was able to identify normal eyes better (P=0.040), but had a poor sensitivity (45%) and specificity (70%) to diagnose glaucoma. The OCT-measured average RNFL thickness showed that 47.1% of normal eyes obeyed the ISNT rule and 58.7% conformed to the "IST" rule. Exclusion of the nasal sector also increased the number of glaucomatous eyes conforming to the IST rule (31% obeyed the ISNT rule and 50% obeyed the IST rule). Sensitivities and specificities of the ISNT and the IST rules for OCT-quantified RNFL ranged from 42% to 77%. CONCLUSIONS: A larger number of normal eyes obeyed the IST rule compared with the ISNT rule for the RNFL thickness measured by HRT and OCT. Exclusion of the nasal sector from the analysis (IST rule) marginally improved the specificity in diagnosing glaucoma at the cost of the sensitivity, making neither of these parameters (ISNT and IST) likely to be useful clinically. DOI: 10.1097/IJG.0000000000000064 | **INTL** | **JAN TO JUN** | **PMID:**24777047 |
|  | Pragasam AK(1), Raghanivedha M(2), Anandan S(3), Veeraraghavan B(4).  Characterization of Pseudomonas aeruginosa with discrepant carbapenemsusceptibility profile.  Ann Clin Microbiol Antimicrob. 2016 Feb 24;15:12. doi: 10.1186/s12941-016-0127-3.  **Author information:**  (1)Department of Clinical Microbiology, Christian Medical College, Vellore, 632004, India. akilaprakasam.90@gmail.com. (2)Department of Clinical Microbiology, Christian Medical College, Vellore, 632004, India. mdragha.10@gmail.com. (3)Department of Clinical Microbiology, Christian Medical College, Vellore, 632004, India. shalinianandan@cmcvellore.ac.in. (4)Department of Clinical Microbiology, Christian Medical College, Vellore, 632004, India. [vbalaji@cmcvellore.ac.in](mailto:vbalaji@cmcvellore.ac.in).  Pseudomonas aeruginosa is the most common nosocomial pathogen, notorious for its multidrug resistance and causes life threatening infections. Carbapenems were considered as the last resort of drugs for the treatment of multi drug resistant P. aeruginosa infections. The emergence of resistance to carbapenems limits its use for treatment. Unlike other organisms, in P. aeruginosa intrinsic/chromosomal mediated resistance mechanisms plays a major role for carbapenem resistance rather than the carbapenemases. Carbapenemase producing organisms becomes resistant to both imipenem and meropenem. However, in our clinical settings, we have observed rare carbapenem resistant phenotypes such as imipenem resistant but meropenem susceptible (IRMS) and meropenem resistant but imipenem susceptible (MRIS) phenotypes. Thus we have chosen these rare phenotypes to look for the respective resistance mechanisms by phenotypic and molecular methods. From this study we found that, IRMS is primarily due to the mutations across various regions in the loops of oprD gene and MRIS is due to the over expression of mexAB efflux pumps. This study results confirms that, this rare phenotypes are due to the intrinsic/chromosomal mediated mechanisms, which occurred due to the antibiotic selection pressure. This study also provided data concerning alterations in outer membrane permeability which is often associated with the increased levels of antibiotic efflux. Consequently, this study provided the prevalence of the various resistance mechanisms that have deployed by the organism to resist antibiotics through different phenotypes. DOI: 10.1186/s12941-016-0127-3 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4765188  **PMID:**26911874 |
|  | Prakasan AM(1), Prabhu AJ(2), Velarasan K(1), Backianathan S(1), Ram TS(1).  Paraneoplastic Pemphigus Associated with Follicular Dendritic Cell Tumor in theMediastinum.  Case Rep Dermatol Med. 2016;2016:6901539. doi: 10.1155/2016/6901539. Epub 2016Apr 11.  **Author information:**  (1)Ida B Scudder Cancer Centre, Radiation Oncology Unit 1, Christian Medical College, Ida Scudder Road, Vellore, Tamil Nadu 632004, India. (2)Department of Pathology, Christian Medical College, Ida Scudder Road, Vellore, Tamil Nadu 632004, India.  Paraneoplastic Pemphigus (PNP) is an autoimmune bullous disease characterized bysevere stomatitis, polymorphous skin eruptions, and underlying neoplasms.Diagnosis of cutaneous paraneoplastic disorders requires high index of suspicion.We describe a patient with PNP associated with follicular dendritic cell (FDC) tumor in the mediastinum, a rare neoplasm originating from follicular dendritic cells. Its management requires identification of underlying malignancy and treatment of the same. Our patient showed remission of PNP upon excision of the tumor and remained disease-free for 8 years. DOI: 10.1155/2016/6901539 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4842386  **PMID:**27190659 |
|  | Premkumar P(1), Antonisamy B(2), Mathews J(3), Benjamin S(3), Regi A(3), JoseR(3), Kuruvilla A(4), Mathai M(5).  Birth weight centiles by gestational age for twins born in south India.  BMC Pregnancy Childbirth. 2016 Mar 24;16:64. doi: 10.1186/s12884-016-0850-y.  **Author information:**  (1)Departments of Biostatistics, Christian Medical College, Vellore, 632 002, India. prasanna.samuel@cmcvellore.ac.in. (2)Departments of Biostatistics, Christian Medical College, Vellore, 632 002, India. (3)Obstetrics and Gynaecology, Christian Medical College, Vellore, 632 002, India. (4)Neonatology, Christian Medical College, Vellore, 632 002, India. (5)Making Pregnancy Safer Department, World Health Organization, Geneva, Switzerland.  BACKGROUND: Birth weight centile curves are commonly used as a screening tool and to assess the position of a newborn on a given reference distribution. Birth weight of twins are known to be less than those of comparable singletons and twin-specific birth weight centile curves are recommended for use. In this study, we aim to construct gestational age specific birth weight centile curves for twins born in south India.METHODS: The study was conducted at the Christian Medical College, Vellore, south India. The birth records of all consecutive pregnancies resulting in twin births between 1991 and 2005 were reviewed. Only live twin births between 24 and 42 weeks of gestation were included. Birth weight centiles for gestational age were obtained using the methodology of generalized additive models for location, scale and shape (GAMLSS). Centiles curves were obtained separately for monochorionic and dichorionic twins. RESULTS: Of 1530 twin pregnancies delivered during the study period (1991-2005), 1304 were included in the analysis. The median gestational age at birth was 36 weeks (1st quartile 34, 3rd quartile 38 weeks). Smoothed percentile curves for birth weight by gestational age increased progressively till 38 weeks and levels off thereafter. Compared with dichorionic twins, monochorionic twins had lower birth weight for gestational age from after 27 weeks. CONCLUSIONS: We provide centile values of birth weight at 24 to 42 completed weeks of gestation for twins born in south India. These charts could be used both in routine clinical assessments and epidemiological studies. DOI: 10.1186/s12884-016-0850-y | **INTL** | **JAN TO JUN** | **PMCID: PMC**4806424  **PMID:**27012538 |
|  | Putta T(1), Chacko BR(2), Joseph E(2).  Intracardiac fistula in a child: a rare complication of infective endocarditis.  Asian Cardiovasc Thorac Ann. 2016 Mar 21. pii: 0218492316640384. [Epub ahead ofprint]  **Author information:**  (1)Department of Radiology, Christian Medical College, Vellore, India tharaniputta@gmail.com. (2)Department of Radiology, Christian Medical College, Vellore, India.  DOI: 10.1177/0218492316640384 | **INTL** | **JAN TO JUN** | **PMID:**27002095 |
|  | Putta T(1), Gibikote S(1), Madhuri V(2), Walter N(3).  Accuracy of Various MRI Sequences in Determining the Tumour Margin in Musculoskeletal Tumours.  Pol J Radiol. 2016 Nov 16;81:540-548. doi: 10.12659/PJR.898108. eCollection 2016.  **Author information:**  (1)Department of Radiology, Christian Medical College, Vellore, Tamil Nadu, India. (2)Department of Paediatric Orthopaedics, Christian Medical College, Vellore, Tamil Nadu, India. (3)Department of Pathology, Christian Medical College, Vellore, Tamil Nadu, India.  BACKGROUND: It is imperative that bone tumour margin and extent of tumour involvement are accurately assessed pre-operatively in order for the surgeon to attain a safe surgical margin. In this study, we comprehensively assessed each of the findings that influence surgical planning, on various MRI sequences and compared them with the gold standard - pathology. MATERIAL/METHODS: In this prospective study including 21 patients with extremity bone tumours, margins as seen on various MRI sequences (T1, T2, STIR, DWI, post-gadolinium T1 FS) were measured and biopsies were obtained from each of these sites during the surgical resection. The resected tumour specimen and individual biopsy samples were studied to assess the true tumour margin. Margins on each of the MRI sequences were then compared with the gold standard - pathology. In addition to the intramedullary tumour margin, we also assessed the extent of soft tissue component, neurovascular bundle involvement, epiphyseal and joint involvement, and the presence or absence of skip lesions. RESULTS: T1-weighted imaging was the best sequence to measure tumour margin without resulting in clinically significant underestimation or overestimation of the tumour extent (mean difference of 0.8 mm; 95% confidence interval between -0.9 mm to 2.5 mm; inter-class correlation coefficient of 0.998). STIR and T1 FS post-gadolinium imaging grossly overestimated tumour extent by an average of 16.7 mm and 16.8 mm, respectively (P values <0.05). Post-gadolinium imaging was better to assess joint involvement while T1 and STIR were the best to assess epiphyseal involvement. CONCLUSIONS: T1-weighted imaging was the best sequence to assess longitudinal intramedullary tumour extent. We suggest that osteotomy plane 1.5 cm beyond the T1 tumour margin is safe and also limits unwarranted surgical bone loss. However, this needs to be prospectively proven with a larger sample size.  DOI: 10.12659/PJR.898108 | **INT** | **JUL TO DEC** | PMID: 28058070 PMCID: PMC5181551 |
|  | Qian P(1), He XC(1), Paulson A(1), Li Z(2), Tao F(2), Perry JM(1), Guo F(1), ZhaoM(1), Zhi L(3), Venkatraman A(4), Haug JS(1), Parmely T(1), Li H(1), DobrowskyRT(5), Ding WX(6), Kono T(7), Ferguson-Smith AC(8), Li L(9).  The Dlk1-Gtl2 Locus Preserves LT-HSC Function by Inhibiting the PI3K-mTOR Pathwayto Restrict Mitochondrial Metabolism.  Cell Stem Cell. 2016 Feb 4;18(2):214-28. doi: 10.1016/j.stem.2015.11.001. Epub2015 Nov 25.  **Author information:**  (1)Stowers Institute for Medical Research, Kansas City, MO 64110, USA. (2)Stowers Institute for Medical Research, Kansas City, MO 64110, USA; Department of Pathology and Laboratory Medicine, University of Kansas Medical Center, Kansas City, KS 66160, USA. (3)Department of Immunology, Tianjin Key Laboratory of Cellular and Molecular Immunology, Key Laboratory of Immuno Microenvironment and Disease of the Educational Ministry, Tianjin Medical University, Tianjin, P.R. China. (4)Centre for Stem Cell Research, Christian Medical College, Vellore, 632002, India. (5)Department of Pharmacology and Toxicology, University of Kansas, Lawrence, KS 66045, USA. (6)Department of Pharmacology, Toxicology and Therapeutics, University of Kansas Medical Center, Kansas City, KS 66160, USA. (7)Department of Bioscience, Tokyo University of Agriculture, Tokyo 156-8502, Japan. (8)Department of Genetics, University of Cambridge, Downing Street, Cambridge CB2 3EG, UK. (9)Stowers Institute for Medical Research, Kansas City, MO 64110, USA; Department of Pathology and Laboratory Medicine, University of Kansas Medical Center, Kansas City, KS 66160, USA. Electronic address: [lil@stowers.org](mailto:lil@stowers.org).  **Comment in**  Stem Cell Investig. 2016;3:29.  Cell Stem Cell. 2016 Feb 4;18(2):158-60.  The mammalian imprinted Dlk1-Gtl2 locus produces multiple non-coding RNAs (ncRNAs) from the maternally inherited allele, including the largest miRNA cluster in the mammalian genome. This locus has characterized functions in some types of stem cell, but its role in hematopoietic stem cells (HSCs) is unknown. Here, we show that the Dlk1-Gtl2 locus plays a critical role in preserving long-term repopulating HSCs (LT-HSCs). Through transcriptome profiling in 17 hematopoietic cell types, we found that ncRNAs expressed from the Dlk1-Gtl2 locus are predominantly enriched in fetal liver HSCs and the adult LT-HSC population and sustain long-term HSC functionality. Mechanistically, the miRNA mega-cluster within the Dlk1-Gtl2 locus suppresses the entire PI3K-mTOR pathway. This regulation in turn inhibits mitochondrial biogenesis and metabolic activity and protects LT-HSCs from excessive reactive oxygen species (ROS) production. Our data therefore show that the imprinted Dlk1-Gtl2 locus preserves LT-HSC function by restricting mitochondrial metabolism. Copyright © 2016 Elsevier Inc. All rights reserved. DOI: 10.1016/j.stem.2015.11.001 | **INTL** | **JAN TO JUN** | **PMID:**26627594 |
|  | Raj RR(1), Subramani S(1).  Phenylephrine Decreases Vascular Tension in Goat Arteries in SpecificCircumstances.  PLoS One. 2016 Jun 30;11(6):e0158551. doi: 10.1371/journal.pone.0158551.  eCollection 2016.  **Author information:**  (1)Department of Physiology, Christian Medical College, Vellore, Tamil Nadu, India.  Phenylephrine (PE) causes vasoconstriction through alpha adrenergic receptors. PE-induced vasodilatation has also been reported earlier in pre-constricted vessels. Here we demonstrate in spiral strips of goat arteries that addition of PE can decrease tone even from base-line levels (i.e. not pre-constricted) and show that this process requires nitric oxide (NO) and alpha adrenergic stimulation, but is cGMP-independent. Under control conditions, PE caused vasoconstriction, but under conditions where NO levels are higher, as with L-Arginine or sodium nitroprusside, PE decreased vessel tension. L-Arginine/PE combination was not able to decrease tension when alpha adrenoceptors were blocked with Phentolamine or endothelial nitric oxide synthase (eNOS) was blocked with Nω-Nitro-L-arginine (L-NNA). Propranolol, a beta blocker, was unable to prevent the reduction in tension by the L-Arginine/PE combination. Adrenaline and noradrenaline (and not isoproterenol) also reduced vessel tension in the presence of L-Arginine. Even when NO levels were not enhanced, relieving NO from having to stimulate the enzyme soluble guanylyl cyclase (sGC) (either by using sGC blockers, namely ODQ or methylene blue, or by enhancing cGMP levels (with sildenafil) which by negative feedback probably inhibits sGC) led to PE-induced reduction of vascular tension. PMA-phorbol myristate acetate-an agonist which stimulates Protein Kinase C was able to prevent the ability of PE to reduce vascular tension in a high NO environment. Our conclusion is that PE reduces vascular tension through alpha adrenoceptors if there is excess NO availability to activate a putative pathway. Though the reduction of vessel tone by PE is ependent on NO, it is independent of cGMP. Prior treatment with PMA or PE itself can prevent further PE-induced reduction of tension in a high NO environment. The results here suggest, counter-intuitively, that alpha blockers may be of help in the treatment of septic shock where nitric oxide levels are high. DOI: 10.1371/journal.pone.0158551 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4928870  **PMID:**27362703 |
|  | Rajadoss MP(1), Berry CJ(1), Rebekah GJ(2), Moses V(3), Keshava SN(3), JacobKS(4), Kumar S(1), Kekre N(1), Devasia A(1).  Predictors of renal recovery in renal failure secondary to bilateral obstructiveurolithiasis.  Arab J Urol. 2016 Sep 23;14(4):269-274. eCollection 2016.  **Author information:**  (1)Department of Urology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. (2)Department of Biostatistics, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. (3)Department of Radiology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. (4)Department of Psychiatry, Christian Medical College and Hospital, Vellore, Tamil Nadu, India.  OBJECTIVES: To identify factors predicting renal recovery in patients presenting with renal failure secondary to bilateral obstructing urolithiasis.  PATIENTS AND METHODS: Data from electronic records of consecutive adult patients presenting with bilateral obstructing urolithiasis between January 2007 and April 2011 were retrieved. Ultrasonography of the abdomen, and kidney, ureter, bladder (KUB study) X-ray or abdominal non-contrast computed tomography confirmed the diagnosis. Interventional radiologists placed bilateral nephrostomies. Definitive intervention was planned after reaching nadir creatinine. Renal recovery was defined as nadir creatinine of ⩽2 mg/dL.  RESULTS: In all, 53 patients were assessed, 50 (94.3%) were male, and 18 (33.9%) were aged ⩽40 years. Renal recovery was achieved in 20 patients (37.7%). A symptom duration of ⩽25 days (P < 0.01), absence of hypertension (P = 0.018), maximum renal parenchymal thickness of >16.5 mm (P = 0.001), and haemoglobin >9.85 g/dL (P < 0.01) were significant on unadjusted analysis. Symptom duration of ⩽25 days alone remained significant after adjusted analysis. Symptom duration of ⩽25 days (hazard ratio (HR) 13.83, 95% confidence interval (CI) 4.52-42.26; P < 0.01), parenchymal thickness of ⩾16.5 mm (HR 5.91, 95% CI 1.94-17.99; P = 0.002), and absence of hypertension (HR 9.99, CI 95% 1.32-75.37; P = 0.026) were significantly related to time to nadir creatinine. Symptom duration of ⩽25 days (HR 17.44, 95% CI 2.48-122.79; P = 0.004) alone remained significant after adjusted analysis. A symptom duration of ⩽25 days (P = 0.007) was 22-times more likely to indicate renal recovery.  CONCLUSIONS: Shorter symptom duration (⩽25 days) is predictive of renal recovery in renal failure secondary to bilateral obstructive urolithiasis.  DOI: 10.1016/j.aju.2016.08.001 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5122748  **PMID:**27900216 |
|  | Rajan RJ(1), Mohanraj P(2), Rose W(3).  Subcutaneous Basidiobolomycosis Resembling Fournier's Gangrene.  J Trop Pediatr. 2016 Oct 29. pii: fmw075. [Epub ahead of print]  **Author information:**  (1)Department of Pediatrics, Christian Medical College, Vellore 632004, India. (2)Department of Microbiology, Christian Medical College, Vellore 632004, India. (3)Department of Pediatrics, Christian Medical College, Vellore 632004, India winsleyrose@cmcvellore.ac.in.  Basidiobolomycosis is an uncommon cutaneous zygomycete infection typically seen in immunocompetent individuals. Diagnosis can be made by biopsy and fungal culture of the lesion. Treatment with Potassium iodide and co-trimoxazole is simple and effective. Early and accurate diagnosis of basidiobolomycosis is essential to avoid dissemination and mortality. We present a case with basidiobolomycosis resembling Fournier's gangrene.  © The Author [2016]. Published by Oxford University Press. All rights reserved. For Permissions, please email: journals.permissions@oup.com.  DOI: 10.1093/tropej/fmw075 | **INTL** | **JUL TO DEC** | **PMID:**27794531 |
|  | Rajan SJ(1), Jacob TM(2), Sathyendra S(1).  Vertical integration of basic science in final year of medical education.  Int J Appl Basic Med Res. 2016 Jul-Sep;6(3):182-5. doi: 10.4103/2229-516X.186958.  **Author information:**  (1)Department of Medicine Unit 3, Christian Medical College, Vellore, Tamil Nadu, India. (2)Department of Anatomy, Christian Medical College, Vellore, Tamil Nadu, India.  BACKGROUND: Development of health professionals with ability to integrate, synthesize, and apply knowledge gained through medical college is greatly hampered by the system of delivery that is compartmentalized and piecemeal. There is a need to integrate basic sciences with clinical teaching to enable application in clinical care.  AIM: To study the benefit and acceptance of vertical integration of basic science in final year MBBS undergraduate curriculum.  MATERIALS AND METHODS: After Institutional Ethics Clearance, neuroanatomy refresher classes with clinical application to neurological diseases were held as part of the final year posting in two medical units. Feedback was collected. Pre- and post-tests which tested application and synthesis were conducted. Summative assessment was compared with the control group of students who had standard teaching in other two medical units. In-depth interview was conducted on 2 willing participants and 2 teachers who did neurology bedside teaching.  RESULTS: Majority (>80%) found the classes useful and interesting. There was statistically significant improvement in the post-test scores. There was a statistically significant difference between the intervention and control groups' scores during summative assessment (76.2 vs. 61.8 P < 0.01). Students felt that it reinforced, motivated self-directed learning, enabled correlations, improved understanding, put things in perspective, gave confidence, aided application, and enabled them to follow discussions during clinical teaching.  CONCLUSION: Vertical integration of basic science in final year was beneficial and resulted in knowledge gain and improved summative scores. The classes were found to be useful, interesting and thought to help in clinical care and application by majority of students.  DOI: 10.4103/2229-516X.186958 | **INTL** | **JUL TO DEC** | **PMCID: PMC**4979300  **PMID:**27563584 |
|  | Rajan SJ(1), Sathyendra S(1), Mathuram AJ(2).  Scrub typhus in pregnancy: Maternal and fetal outcomes.  Obstet Med. 2016 Dec;9(4):164-166. Epub 2016 May 5.  **Author information:**  (1)Department of Medicine Unit 3, Christian Medical College, Vellore, India. (2)Department of Medicine Unit 1, Christian Medical College, Vellore, India.  Scrub typhus is an important unrecognized cause for undifferentiated acute febrile illness in India associated with poor fetal outcomes. Maternal and fetal outcomes among pregnant patients with scrub typhus presenting to a tertiary care university teaching hospital from January 2010 to July 2012 were studied. Scrub typhus was diagnosed by clinical criteria along with scrub ELISA positivity or an eschar. In total, 33 of 738 patients (4.5%) who were diagnosed with scrub typhus were pregnant; 57.6% were in the third trimester, 27.3% in the second, and only 15.2% in the first trimester; 69.7% required admission to intensive care. Mortality was low (3%, n = 1) compared to 12.2% mortality reported previously. All patients were treated with Azithromycin. Poor fetal outcome was observed in 51.5% of these pregnancies with fetal loss occurring in 42.4% and preterm childbirth in 9.1%. Scrub typhus complicating pregnancy is associated with a poor fetal outcome despite treatment with Azithromycin. A majority require intensive care treatment for survival.  DOI: 10.1177/1753495X16638952 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5089339  **PMID:**27829876 |
|  | Rajshekhar V(1), Moorthy RK(2), Jeyaseelan V(3), John S(4), Rangad F(4),Viswanathan PN(4), Ravindran P(4), Singh R(4).  Results of a Conservative Dose Plan Linear Accelerator-Based StereotacticRadiosurgery for Pediatric Intracranial Arteriovenous Malformations.  World Neurosurg. 2016 Nov;95:425-433. doi: 10.1016/j.wneu.2016.06.007. Epub 2016Jun 11.  **Author information:**  (1)Department of Neurological Sciences, Christian Medical College, Vellore 632004, Tamilnadu, India. Electronic address: rajshekhar@cmcvellore.ac.in. (2)Department of Neurological Sciences, Christian Medical College, Vellore 632004, Tamilnadu, India. (3)Department of Biostatistics, Christian Medical College, Vellore 632004, Tamilnadu, India. (4)Department of Radiotherapy, Christian Medical College, Vellore 632004, Tamilnadu, India.  OBJECTIVE: To evaluate the obliteration rate and clinical outcome following linear accelerator (LINAC)-based stereotactic radiosurgery (SRS) for intracranial arteriovenous malformation (AVM) in pediatric patients (age ≤18 years).  METHODS: Factors associated with the obliteration rate and neurologic complications were studied retrospectively in pediatric patients who underwent LINAC-based SRS for AVM between June 1995 and May 2014.  RESULTS: The study cohort comprised 36 males and 33 females, with a median age at the time of SRS of 14 years (range, 7-18 years). The mean AVM volume was 8.5 ± 8.7 cc (range, 0.6-41.8 cc). The median marginal dose of radiation delivered was 15 Gy (range, 9-20 Gy). Magnetic resonance imaging (MRI) demonstrated complete obliteration of the AVM in 44 of the 69 patients (63.8%), at a mean follow up of 27.5 months (range, 12-90 months). On subgroup analysis, 41 of the 53 AVMs of ≤14 cc in volume (77.3%) were obliterated. AVMs with a modified AVM radiosurgery score <1 had significantly shorter obliteration times from the time of SRS (P = .006). On multivariate analysis, the mean marginal dose of radiation delivered to the AVM was the sole significant predictor of obliteration (odds ratio, 1.6; 95% confidence interval, 1 to 2.4).  CONCLUSIONS: A modest median marginal dose of 15 Gy (16 Gy in the obliterated AVM group vs. 12 Gy in the nonobliterated group) resulted in an obliteration rate of 66.7% after LINAC-based SRS for intracranial AVM, with low rate.  Copyright © 2016 Elsevier Inc. All rights reserved.  DOI: 10.1016/j.wneu.2016.06.007 | **INTL** | **JUL TO DEC** | **PMID:**27302562 |
|  | Ramakrishna BS(1), Makharia GK(2), Chetri K(3), Dutta S(4), Mathur P(5), AhujaV(2), Amarchand R(6), Balamurugan R(1), Chowdhury SD(1), Daniel D(7), Das A(4),George G(1), Gupta SD(8), Krishnan A(6), Prasad JH(9), Kaur G(10), PugazhendhiS(1), Pulimood A(1), Ramakrishna K(1), Verma AK(1).  Prevalence of Adult Celiac Disease in India: Regional Variations andAssociations.  Am J Gastroenterol. 2016 Jan;111(1):115-23. doi: 10.1038/ajg.2015.398. Epub 2016Jan 5.  **Author information:**  (1)Department of Gastrointestinal Sciences, Christian Medical College, Vellore, India. (2)Department of Gastroenterology and Human Nutrition, All India Institute of Medical Sciences, New Delhi, India. (3)Department of Gastroenterology, International Hospital, Guwahati, India. (4)Department of Medicine, Guwahati Medical College, Guwahati, India. (5)Indian Council of Medical Research, New Delhi, India. (6)Department of Community Medicine, All India Institute of Medical Sciences, New Delhi, India. (7)Department of Transfusion Medicine, Christian Medical College, Vellore, India. (8)Department of Pathology, All India Institute of Medical Sciences, New Delhi, India. (9)Department of Community Health, Christian Medical College, Vellore, India. (10)Department of Transfusion Medicine and Immunohematology, All India Institute of Medical Sciences, New Delhi, India.  OBJECTIVES: Although celiac disease (CeD) affects 1% of people in the northern part of India, it is believed to be uncommon in the southern and northeastern parts because of significant differences in dietary pattern and ethnicity. We estimated the prevalence of CeD in these three populations. In a subset, we also investigated differences in the prevalence of HLA-DQ 2/8 allelotype and dietary grain consumption. METHODS: A total of 23,331 healthy adults were sampled from three regions of India-northern (n=6207), northeastern (n=8149), and southern (n=8973)-and screened for CeD using IgA anti-tissue transglutaminase antibody. Positive tests were reconfirmed using a second ELISA. CeD was diagnosed if the second test was positive and these participants were further investigated. A subsample of participants was tested for HLA-DQ2/-DQ8 and underwent detailed dietary evaluation. RESULTS: Age-adjusted prevalence of celiac autoantibodies was 1.23% in northern, 0.87% in northeastern, and 0.10% in southern India (P<0.0001). Prevalence of CeD and latent CeD, respectively, was 8.53/1,000 and 3.70/1,000 in northern, 4.66/1,000 and 3.92/1,000 in northeastern, and 0.11/1,000 and 1.22/1,000 in the southern part. The population prevalence of genes determining HLA-DQ2 and/or -DQ8 expression was 38.1% in northern, 31.4% in northeastern, and 36.4% in southern India. Mean daily wheat intake was highest in northern (455 g) compared with northeastern (37 g) or southern part (25 g), whereas daily rice intake showed an inverse pattern. CONCLUSIONS: CeD and latent CeD were most prevalent in northern India and were the least in southern India. The prevalence correlated with wheat intake and did not reflect differences in the genetic background. DOI: 10.1038/ajg.2015.398 | **INTL** | **JAN TO JUN** | **PMID:**26729543 |
|  | Ramakrishna K(1), Premkumar K(2), Kabeerdoss J(2), John KR(3).  Impaired toll like receptor 9 response in pulmonary tuberculosis.  Cytokine. 2016 Oct 18;90:38-43. doi: 10.1016/j.cyto.2016.10.006. [Epub ahead ofprint]  **Author information:**  (1)Wellcome Trust Research Laboratory, Christian Medical College, Vellore 632004, India. Electronic address: kartik\_ramakrishna@hotmail.com. (2)Wellcome Trust Research Laboratory, Christian Medical College, Vellore 632004, India. (3)Department of Community Health, Christian Medical College, Vellore 632004, India.  BACKGROUND & AIM: Innate immune responses are important in susceptibility to pulmonary tuberculosis (TB). In order to test the hypothesis that Toll-like receptor (TLR) 2 function would be abnormal in patients with active pulmonary TB we compared the cytokine responses of peripheral blood mononuclear cells (PBMC) to innate immune ligands in a case-control study.  METHODS: PBMC from 19 untreated pulmonary TB patients, 17 healthy controls, and 11 treated pulmonary TB patients, were cultured for 24h with TLR 2 ligand (PAM-CSK) and other TLR ligands (muramyl dipeptide, flagellin, lipopolysaccharide (LPS), CpG oligodeoxynucleotide (CpG-ODN)). Interleukin-8 (IL-8) was estimated in the supernatant by ELISA. Messenger RNA expression for inflammatory cytokines was quantitated using real time PCR.  RESULTS: The important findings were (1) reduced PBMC secretion of IL-8 in response to all ligands in active TB; (2) normal to increased PBMC secretion of IL-8 in response to all ligands except CpG ODN (TLR 9 ligand) in TB patients who had recovered; (3) absence of difference in mRNA expression for a consortium of inflammatory pathway genes between healthy controls, active pulmonary tuberculosis and treated pulmonary tuberculosis patients.  CONCLUSION: There was a generalized post-translational suppression of the IL-8 response to innate immune ligands in active TB. There appears to be a defect of TLR 9 signaling in patients with tuberculosis, the nature of which needs to be further explored.  Copyright © 2016 Elsevier Ltd. All rights reserved.  DOI: 10.1016/j.cyto.2016.10.006 | **INTL** | **JUL TO DEC** | **PMID:**27768958 |
|  | Ramamoorthy H(1), Abraham P(2), Isaac B(3), Selvakumar D(1).  Role for NF-κB inflammatory signalling pathway in tenofovir disoproxil fumarate(TDF) induced renal damage in rats.  Food Chem Toxicol. 2016 Nov 27;99:103-118. doi: 10.1016/j.fct.2016.11.029. [Epubahead of print]  **Author information:**  (1)Department of Biochemistry, Christian Medical College, Bagayam, Vellore 632002, Tamil Nadu, India. (2)Department of Biochemistry, Christian Medical College, Bagayam, Vellore 632002, Tamil Nadu, India. Electronic address: premilaabraham@cmcvellore.ac.in. (3)Department of Anatomy, Christian Medical College, Bagayam, Vellore 632002, Tamil Nadu, India.  Nephrotoxicity due to tenofovir treatment of HIV patients has been reported. However, the mechanism of tenofovir nephrotoxicity is not clear. NFκB is an important proinflammatory transcription factor that plays a pivotal role in oxidative stress-induced inflammation. We hypothesized that NFκB proinflammatory signalling pathway may play a role in tenofovir induced renal damage. Renal damage was induced in adult male Wistar rats by the oral administration of 600 mg/kg body wt. daily for 5 consecutive weeks. Kidneys were removed and used for histological and biochemical analysis. The protein and mRNA expressions of NFκB and its target genes namely iNOS, COX-2 and TNFα, and its inhibitor IκB-alpha were analysed by immunohistochemical methods, western blot and quantitative RT PCR. NFκBp65 activity was determined by ELISA. The protein and mRNA expressions of NFκB p65, iNOS, COX-2 and TNFα were increased in the kidneys of TDF treated rats. The activity of NFκBp65 was increased by 28 fold in the nuclear fractions of the TDF treated rat kidneys. Pretreatment with melatonin, a NFκB inhibitor attenuated TDF induced renal damage. It is concluded that the activation of NFκB and its downstream proinflammatory target genes iNOS, COX-2, and TNF-α may contribute to the pathophysiology of TDF induced renal damage.  Copyright Â© 2016 Elsevier Ltd. All rights reserved.  DOI: 10.1016/j.fct.2016.11.029 | **INTL** | **JUL TO DEC** | **PMID:**27899301 |
|  | Ramasamy A(1), Das S(2), Mani V(3), Sengottuvelu S(4), Vinoth Prabhu V(1).  Evaluation of Anti-diarrheal Potential of Hydro-alcoholic Extracts of Leaves ofMurraya koenigii in Experimental Animals.  J Diet Suppl. 2016;13(4):393-401. doi: 10.3109/19390211.2015.1101636. Epub 2015Dec 2.  **Author information:**  (1)a Department of Pharmacology, Swamy Vivekanandha College of Pharmacy , Namakkal , Tamil Nadu , India. (2)b Department of Pharmacology, Christian Medical College , Vellore , Tamil Nadu , India. (3)c Faculty of Pharmacy, Brain Research Laboratory, Universiti Teknologi MARA , Selangor , Malaysia. (4)d Department of Pharmacology, Nandha College of Pharmacy , Erode , Tamil Nadu , India.  BACKGROUND: The indigenous medical system of India mentions the use of Murraya koenigii leaves for the treatment of different types of diarrheas over ages. OBJECTIVE: To evaluate the anti-diarrheal activity of hydro-alcoholic extracts of leaves of Murraya koenigii and to check its effects on intestinal transits in experimental rat model. MATERIALS AND METHODS: The hydro-alcoholic extract of Murraya koenigii leaves was obtained with Soxhlet extraction method. Animals were divided into four groups (n = 6) receiving daily for three consecutive days: vehicle, standard drug atropine (3mg/kg, i.p.), leaf extracts 200 & 400 mg/kg respectively in oral route. Effects of the drugs on normal defecation were noted and then castor oil induced diarrhea was used to measure the effects of leaf extract on stool frequency and consistency. Finally, charcoal meal test was used to evaluate the effect of the extract on intestinal transit. Statistical evaluation was done using SPSS version 17, one way ANOVA followed by Dunnett's t-test was done and P< 0.001 was considered as significant. RESULTS: Murraya koenigii leaf extracts in 200 and 400 mg/kg dose reduced stool frequency, increased stool consistency and increased small intestinal transit time. CONCLUSION: Hydro-alcoholic extract of Murraya koenigii leaves possesses significant anti-diarrheal activity due to its inhibitory effect on gastrointestinal motility, making it useful for a wide number of gastrointestinal diseases. DOI: 10.3109/19390211.2015.1101636 | **INTL** | **JAN TO JUN** | **PMID:**26631977 |
|  | Ramprasad C(1), Zachariah R(2), Steinhoff M(3), Simon A(2).  Parental attitudes towards influenza vaccination for children in South India.  World J Pediatr. 2016 Aug 31. [Epub ahead of print]  **Author information:**  (1)University of Miami Miller School of Medicine, Miami, Florida, USA. chethanramprasad@gmail.com. (2)Christian Medical College, Vellore, Tamil Nadu, India. (3)Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio, USA.  BACKGROUND: The rate of influenza vaccination is low for children in India. The purpose of this study is to assess parental attitudes towards influenza vaccination in South India.  METHODS: Participants were parents who brought their children to the Well Baby Clinic of Christian Medical College Hospital, Vellore, India for routine immunization. Participants answered questions by written survey while waiting for their children's vaccination.  RESULTS: A total of 456 surveys were completed (403 parents did not opt for trivalent influenza vaccination and 53 opted for influenza vaccination). The majority (53.60%) of those parents who did not accept influenza vaccination identified the lack of a doctor's recommendation as the main reason. When asked separately, many non-acceptors (44.91%) indicated that they did not believe or were not sure that the influenza vaccine was effective. Nearly all non-acceptors (92.56%) stated that they would opt for influenza vaccination if a doctor recommended it.  CONCLUSIONS: The most common reason that parents not opting for influenza vaccination for their children was the lack of recommendation by a doctor. The results of this study suggest that recommendation by a doctor is a more important factor than belief in efficacy, cost, or convenience in parental decision-making regarding childhood influenza vaccination in India, unlike the United States where parents are less likely to follow recommendations.  DOI: 10.1007/s12519-016-0053-7 | **INTL** | **JUL TO DEC** | **PMID:**27577192 |
|  | Rana D(1), Ramasamy K(1), Leena M(2), Jiménez C(3,)(4), Campos J(3,)(5), Ibarr P(3,)(5), Haidar ZS(3,)(5), Ramalingam M(1,)(6).  Surface functionalization of nanobiomaterials for application in stem cell culture, tissue engineering, and regenerative medicine.  Biotechnol Prog. 2016 May;32(3):554-67. doi: 10.1002/btpr.2262. Epub 2016 Apr 14.  **Author information:** (1)Centre for Stem Cell Research (CSCR), A Unit of Institute for Stem Cell Biology and Regenerative Medicine-Bengaluru, Stem Cell Nanotechnology Lab, Christian Medical College Campus, Vellore, 632002, India. (2)Dept. of Nanoscience and Technology, Karunya University, Coimbatore, 641114, India. (3)BioMAT'X, Facultad De Odontología, Universidad De Los Andes, Mons. Álvaro Del Portillo, Santiago, 12.455, Chile. (4)Centro De Investigación Biomédica (CIB), Facultad De Medicina, Universidad De Los Andes, Mons. Álvaro Del Portillo, Santiago, 12.455, Chile. (5)Plan De Mejoramiento Institucional (PMI) En Innovación-I+D+I, Universidad De Los Andes, Santiago, 12.455, Chile. (6)WPI-Advanced Institute for Materials Research, Tohoku University, Sendai, 980-8577, Japan.  Stem cell-based approaches offer great application potential in tissue engineering and regenerative medicine owing to their ability of sensing the microenvironment and respond accordingly (dynamic behavior). Recently, the combination of nanobiomaterials with stem cells has paved a great way for further exploration. Nanobiomaterials with engineered surfaces could mimic the native microenvironment to which the seeded stem cells could adhere and migrate. Surface functionalized nanobiomaterial-based scaffolds could then be used to regulate or control the cellular functions to culture stem cells and regenerate damage tissues or organs. Therefore, controlling the interactions between nanobiomaterials and stem cells is a critical factor. However, surface functionalization or modification techniques has provided an alternative approach for tailoring the nanobiomaterials surface in accordance to the physiological surrounding of a living cells; thereby, enhancing the structural and functional properties of the engineered tissues and organs. Currently, there are a variety of methods and technologies available to modify the surface of biomaterials according to the specific cell or tissue properties to be regenerated. This review highlights the trends in surface modification techniques for nanobiomaterials and the biological relevance in stem cell-based tissue engineering and regenerative medicine. © 2016 American Institute of ChemicEngineers Biotechnol. Prog., 32:554-567, 2016. © 2016 American Institute of Chemical Engineers. DOI: 10.1002/btpr.2262 | **INT** | **JAN TO JUN** | **PMID:** 27006260 |
|  | Ranganath P(1,)(2), Matta D(2), Bhavani GS(3), Wangnekar S(2), Jain JM(2), VermaIC(4), Kabra M(5), Puri RD(4), Danda S(6), Gupta N(5), Girisha KM(3), SankarVH(7), Patil SJ(8), Ramadevi AR(9), Bhat M(10), Gowrishankar K(11), Mandal K(12),Aggarwal S(1,)(2), Tamhankar PM(13), Tilak P(14), Phadke SR(12), Dalal A(15).  Spectrum of SMPD1 mutations in Asian-Indian patients with acid sphingomyelinase(ASM)-deficient Niemann-Pick disease.  Am J Med Genet A. 2016 Oct;170(10):2719-30. doi: 10.1002/ajmg.a.37817. Epub 2016Jun 24.  **Author information:**  (1)Department of Medical Genetics, Nizam's Institute of Medical Genetics, Hyderabad, Telangana, India. (2)Diagnostics Division, Centre for DNA Fingerprinting and Diagnostics, Hyderabad, Telangana, India. (3)Department of Medical Genetics, Kasturba Medical College, Manipal University, Manipal, Karnataka, India. (4)Center of Medical Genetics, Sir GangaRam Hospital, New Delhi, India. (5)Genetics Unit, Department of Pediatrics, All India Institute of Medical Sciences, New Delhi, India. (6)Department of Clinical Genetics, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. (7)Genetic Clinic, Department of Pediatrics, SAT Hospital, Government Medical College, Thiruvananthapuram, Kerala, India. (8)Clinical Genetics Unit, Mazumdhar Shaw Medical Center, Bengaluru, Karnataka, India. (9)Division of Genetics, Rainbow Children's Hospital, Hyderabad, Telangana, India. (10)Centre for Human Genetics, Bengaluru, Karnataka, India. (11)Department of Medical Genetics, CHILDS Trust Medical Research Foundation, Kanchi Kamakoti CHILDS Trust Hospital, Chennai, Tamil Nadu, India. (12)Department of Medical Genetics, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, Uttar Pradesh, India. (13)Genetic Research Centre, National Institute for Research in Reproductive Health, Mumbai, Maharashtra, India. (14)Division of Human Genetics, St. John's Medical College, Bengaluru, Karnataka, India. (15)Diagnostics Division, Centre for DNA Fingerprinting and Diagnostics, Hyderabad, Telangana, India. ashwindalal@gmail.com.  Acid sphingomyelinase (ASM)-deficient Niemann-Pick disease is an autosomal recessive lysosomal storage disorder caused by biallelic mutations in the SMPD1 gene. To date, around 185 mutations have been reported in patients with ASM-deficient NPD world-wide, but the mutation spectrum of this disease in India has not yet been reported. The aim of this study was to ascertain the mutation profile in Indian patients with ASM-deficient NPD. We sequenced SMPD1 in 60 unrelated families affected with ASM-deficient NPD. A total of 45 distinct pathogenic sequence variants were found, of which 14 were known and 31 were novel. The variants included 30 missense, 4 nonsense, and 9 frameshift (7 single base deletions and 2 single base insertions) mutations, 1 indel, and 1 intronic duplication. The pathogenicity of the novel mutations was inferred with the help of the mutation prediction software MutationTaster, SIFT, Polyphen-2, PROVEAN, and HANSA. The effects of the identified sequence variants on the protein structure were studied using the structure modeled with the help of the SWISS-MODEL workspace program. The p. (Arg542JUL TO DEC) (c.1624C>T) mutation was the most commonly identified mutation, found in 22% (26 out of 120) of the alleles tested, but haplotype analysis for this mutation did not identify a founder effect for the Indian population. To the best of our knowledge, this is the largest study on mutation analysis of patients with ASM-deficient Niemann-Pick disease reported in literature and also the first study on the SMPD1 gene mutation spectrum in India. © 2016 Wiley Periodicals, Inc.  © 2016 Wiley Periodicals, Inc.  DOI: 10.1002/ajmg.a.37817 | **INTL** | **JUL TO DEC** | **PMID:**27338287 |
|  | Ravindran P(1), WuiAnn W(2), Lim Y(2).  SU-F-T-526: A Comparative Study On Gating Efficiency of Varian RPM Device and  Calypso System.  Med Phys. 2016 Jun;43(6):3584. doi: 10.1118/1.4956711.  **Author information:**  (1)Christian Medical College Hospital, Vellore. (2)The Brunei Cancer Center, Brunei.  PURPOSE: In general, the linear accelerator is gated using respiratory signal obtained by way of external sensors to account for the breathing motion during radiotherapy. One of the commonly used gating devices is the Varian RPM device. Calypso system that uses electromagnetic tracking of implanted or surface transponders could also be used for gating. The aim of this study is to compare the gating efficiency of RPM device and the calypso system by phantom studies. METHODS: An ArcCheck insert was used as the phantom with a Gafchromic film placed in its holder. The ArcCheck insert was placed on a Motion Sim platform and moved in the longitudinal direction simulating a respiratory motion with a period of 5 seconds and amplitude of ±6mm. The Gafchromic film was exposed to a 2 × 2cm(2) field, i) with the phantom static, ii) phantom moving but ungated iii) gated with gating window of 2mm and 3mm. This was repeated with Calypso system using surface transponders with the same gating window. The Gafchromic films were read with an EPSON 11000 flatbed scanner and analysed with ߢMedphysto' software. RESULTS: The full width at half maximum (FWHM) as measured with film at the level of the film holder was 1.65cm when the phantom was static. FWHM measured with phantom moving and without gating was 1.16 cm and penumbra was 7 mm (80-20%) on both sides. When the beam was gated with 2 mm gating window the FWHM was 1.8 cm with RPM device and 1.9 cm with Calypso. Similarly, when the beam was gated with 3 mm window, the FWHM was 1.9cm with RPM device and 2cm with Calypso. CONCLUSION: This work suggests that the gating efficiency of RPM device is better than that of the Calypso with surface transponder, with reference to the latency in gating. © 2016 American Association of Physicists in Medicine.DOI: 10.1118/1.4956711 | **INT** | **JUL TO DEC** | PMID: 28047630 |
|  | Ravindran PB(1,)(2,)(3).  A study of Winston-Lutz test on two different electronic portal imaging devicesand with low energy imaging.  Australas Phys Eng Sci Med. 2016 Sep;39(3):677-85. doi:10.1007/s13246-016-0463-9. Epub 2016 Jul 19.  **Author information:**  (1)Department of Radiation Oncology, The Brunei Cancer Center, Bandar Seri Begawan, Brunei Darussalam. bpaulravindran@gmail.com. (2)Faculty of Science, University of Brunei Darussalam, Bandar Seri Begawan, Brunei Darussalam. bpaulravindran@gmail.com. (3)Christian Medical College, Vellore, India. bpaulravindran@gmail.com.  Stereotactic radiosurgery requires sub-millimetre accuracy in patient positioning and target localization. Therefore, verification of the linear accelerator (linac) isocentre and the laser alignment to the isocentre is performed in some clinics prior to the treatment using the Winston-Lutz (W-L) test with films and more recently with images obtained using the electronic portal imaging devices (EPID). The W-L test is performed by acquiring EPID images of a radio-opaque ball of 6 mm diameter (the W-L phantom) placed at the isocentre of the linac at various gantry and table angles, with a predefined small square or circular radiation beam. In this study, the W-L test was performed on two linacs having EPIDs of different size and resolution, viz, a TrueBeam™ linac with aS1000 EPID of size 40 × 30 cm(2) with 1024 × 768 pixel resolution and an EDGE™ linac having an EPID of size 43 × 43 cm(2) with pixel resolution of 1280 × 1280. In order to determine the displacement of the radio-opaque ball centre from the radiation beam centre of the W-L test, an in-house MATLAB™ image processing code was developed using morphological operations. The displacement in radiation beam centre at each gantry and couch position was obtained by determining the distance between the radiation field centre and the radio-opaque ball centre for every image. Since the MATLAB code was based on image processing that was dependent on the image contrast and resolution, the W-L test was also compared for images obtained with different beam energies. The W-L tests were performed for 6 and 8 MV beams on the TrueBeam™ linac and for 2.5 and 6 MV beams on the EDGE™ linac with a higher resolution EPID. It was observed that the images obtained with the EPID of higher resolution resulted in same accuracy in the determination of the displacement between the centres of the radio-opaque ball and the radiation beam, and significant difference was not observed with images acquired with different energies. It is concluded that the software based on morphological operations provided an accurate estimation of the displacement of the ball centre from the radiation beam center.  DOI: 10.1007/s13246-016-0463-9 | **INTL** | **JUL TO DEC** | **PMID:**27435984 |
|  | Reji KK(1), Mathew V(1), Zachariah A(2), Patil AK(1), Hansdak SG(2), Ralph R(2),Peter JV(3).  Extrapyramidal effects of acute organophosphate poisoning.  Clin Toxicol (Phila). 2016 Mar;54(3):259-65. doi: 10.3109/15563650.2015.1126841.Epub 2016 Jan 6.  **Author information:**  (1)a Department of Neurology , Christian Medical College , Vellore , Tamil Nadu , India ; (2)b Department of Medicine , Christian Medical College , Vellore , Tamil Nadu , India ; (3)c Medical Intensive Care Unit , Christian Medical College , Vellore , Tamil Nadu , India.  BACKGROUND: There is limited information on extrapyramidal symptoms in acute organophosphate (OP) poisoning. We describe the course and outcome of severely poisoned patients who develop extrapyramidal manifestations. METHODS: In this prospective observational study, spanning 8 months (Apr-Nov 2013) adult patients (>18 years) admitted with OP poisoning were enrolled. Patients on anti-psychotic therapy, those refusing consent or presenting with co-ingestions were excluded. Treatment included atropine and supportive care (e.g. ventilation and inotropes as indicated); oximes were not administered. The presence of rigidity, tremors, dystonia and chorea were assessed daily till discharge using modifications of the Unified Parkinson's Disease rating scale and the Tremor rating scale. The presence of extrapyramidal manifestations was correlated with length of ventilation and hospital stay and mortality. RESULTS: Of the 77 patients admitted with OP poisoning, 32 were enrolled; 17 (53.1%) developed extrapyramidal manifestations which included rigidity (94.1%), tremors (58.8%) and dystonia (58.8%). None developed chorea. The median (inter-quartile range) time of symptom onset was 8 (5-11) days; extrapyramidal features resolved in 11 (6-17) days. The median duration of intensive care stay in patients not developing extrapyramidal symptoms was 6 (2-8) days, indicating that most of these patients had recovered even before symptom onset in patients who developed extrapyramidal manifestations. Overall, 27/32 (84%) were ventilated. Hospital mortality was 6.25% (2/32). When compared with patients not developing extrapyramidal signs, those with extrapyramidal manifestations had significantly prolonged ventilation (5 versus 16 median days; p = 0.001) and hospitalization (8 versus 21 days; p < 0.001), reduced ventilator-free days (23 versus 12 days; p = 0.023) and increased infections (p = 0.03). The need for ventilation and mortality were not significantly different (p > 0.6). Extrapyramidal symptoms were not observed in non-OP poisoned patients with prolonged ICU stay. CONCLUSION: In this small series of acute OP poisoning, extrapyramidal manifestations were common after 1 week of intensive care but self-limiting. They are significantly associated with longer duration of ventilation and hospital stay. DOI: 10.3109/15563650.2015.1126841 | **INTL** | **JAN TO JUN** | **PMID:**26735571 |
|  | Revanappa KK(1), Moorthy RK(1), Alexander M(1), Rajshekhar V(1).  Recovery of sympathetic skin response after central corpectomy in patients withmoderate and severe cervical spondylotic myelopathy.  Br J Neurosurg. 2016 Jul 14:1-6. [Epub ahead of print]  **Author information:**  (1)a Department of Neurological Sciences , Christian Medical College , Vellore , India.  BACKGROUND: There are sparse data on the recovery of sympathetic skin response (SSR) following decompressive surgery in patients with cervical spondylotic myelopathy (CSM). We designed a study to assess SSR in patients with moderate and severe (Nurick grades 3, 4 and 5) CSM, and its recovery following central corpectomy (CC).  METHOD: We conducted a prospective study on 19 patients with moderate and severe CSM who underwent CC from June 2008 to December 2010. Autonomic dysfunction was defined as the presence of 'bladder dysfunction' or 'orthostatic hypotension'. All patients underwent SSR test preoperatively and at follow-up. Functional evaluation was done using Nurick grade and modified Japanese Orthopedic Association (mJOA) score preoperatively and at follow-up.  FINDINGS: In the preoperative assessment, 14 of 19 (73.7%) patients had bladder dysfunction and orthostatic hypotension. SSR was absent in 13 (68.4%) patients preoperatively. At a mean follow-up of 14.5 months after CC, SSR was present in 12 of the 14 patients available for follow-up. SSR returned postoperatively in 9 of the 11 patients in whom it was absent preoperatively. Recovery of SSR postoperatively had significant correlation with improvement in Nurick grade (p =0.02), improvement in lower limb component of mJOA score (p =0.001) and Nurick grade recovery rate (p = 0.008).  CONCLUSIONS: Dysfunction of the autonomic pathways as determined by the SSR is seen in nearly 70% of patients with moderate and severe CSM but did not correlate with other autonomic functions, suggesting possibly different pathways for different autonomic functions. Following uninstrumented CC, SSR returned in almost 80% of patients in whom it was absent preoperatively and this correlated significantly with improvement in functional grade. Decompressive surgery can reverse autonomic dysfunction in most of these patients.  DOI: 10.1080/02688697.2016.1206178 | **INTL** | **JUL TO DEC** | **PMID:**27416074 |
|  | Riddell A(1), Chuansumrit A(2), El-Ekiaby M(3), Nair SC(4).  Diagnostic laboratory for bleeding disorders ensures efficient management ofhaemorrhagic disorders.  Haemophilia. 2016 Jul;22 Suppl 5:90-5. doi: 10.1111/hae.12988.  **Author information:**  (1)KD Haemophilia Centre and Thrombosis Unit, Royal Free Hospital, London, UK. (2)Department of Pediatrics, Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok, Thailand. (3)Shabrawishi Blood Bank, Shabrawishi Hospital, Cairo, Egypt. (4)Department of Transfusion Medicine and Immunohaematology, Christian Medical College, Vellore, India.  Haemorrhagic disorders like Postpartum haemorrhage and Dengue haemorrhagic fever are life threatening and requires an active and efficient transfusion service that could provide the most appropriate blood product which could be effective in managing them. This would essentially require prompt identification of the coagulopathy so that the best available product can be given to the bleeding patient to correct the identified haemostatic defect which will help control the bleeding. This would only be possible if the transfusion service has a laboratory to correctly detect the haemostatic defect and that too with an accuracy and precision which is ensured by a good laboratory quality assurance practices. These same processes are necessary for the transfusion services to ensure the quality of the blood products manufactured by them and that it contains adequate amounts of haemostasis factors which will be good to be effective in the management of haemorrhagic disorders. These issues are discussed in detail individually in the management of postpartum haemorrhage and Dengue haemorrhagic fever including when these can help in the use of rFVIIa in Dengue haemorrhagic fever. The requirements to ensure good-quality blood products are made available for the management of these disorders and the same have also been described.  © 2016 John Wiley & Sons Ltd.  DOI: 10.1111/hae.12988 | **INTL** | **JUL TO DEC** | **PMID:**27405683 |
|  | Rodger A(1), Sen I(1), Nidugala Keshava S(2), Agarwal S(1).  Diagnosis of a varicose aneurysm is rare but not obsolete.  J Vasc Surg Venous Lymphat Disord. 2016 Oct;4(4):482. doi:10.1016/j.jvsv.2015.10.050.  **Author information:**  (1)Department of Vascular Surgery, Christian Medical College, Vellore, Tamil Nadu, India. (2)Department of Radiology, Christian Medical College, Vellore, Tamil Nadu, India.  DOI: 10.1016/j.jvsv.2015.10.050 | **INTL** | **JUL TO DEC** | **PMID:**27639004 |
|  | Rogawski ET(1), Westreich DJ, Kang G, Ward HD, Cole SR.  Brief Report: Estimating Differences and Ratios in Median Times to Event.  Epidemiology. 2016 Nov;27(6):848-51. doi: 10.1097/EDE.0000000000000539.  **Author information:**  (1)From the aDepartment of Epidemiology, University of North Carolina at Chapel Hill, Chapel Hill, NC; bDivision of Gastrointestinal Sciences, Christian Medical College, Vellore, India; and cDivision of Geographic Medicine and Infectious Diseases, Tufts Medical Center, Boston, MA.  Time differences and time ratios are often more interpretable estimates of effect than hazard ratios for time-to-event data, especially for common outcomes. We developed a SAS macro for estimating time differences and time ratios between baseline-fixed binary exposure groups based on inverse probability-weighted Kaplan-Meier curves. The macro uses pooled logistic regression to calculate inverse probability of censoring and exposure weights, draws Kaplan-Meier curves based on the weighted data, and estimates the time difference and time ratio at a user-defined survival proportion. The macro also calculates the risk difference and risk ratio at a user-specified time. Confidence intervals are constructed by bootstrap. We provide an example assessing the effect of exclusive breastfeeding during diarrhea on the incidence of subsequent diarrhea in children followed from birth to 3 years in Vellore, India. The SAS macro provided here should facilitate the wider reporting of time differences and time ratios.  DOI: 10.1097/EDE.0000000000000539 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5039102  **PMID:**27465526 |
|  | Rose W(1), Rajan RJ(2), Punnen A(2), Ghosh U(2).  Distribution of Eschar in Pediatric Scrub Typhus.  J Trop Pediatr. 2016 Oct;62(5):415-20. doi: 10.1093/tropej/fmw027. Epub 2016 Apr27.  **Author information:**  (1)Department of Pediatrics, Christian Medical College, Vellore 632004, India winsleyrose@cmcvellore.ac.in. (2)Department of Pediatrics, Christian Medical College, Vellore 632004, India.  BACKGROUND: Identifying an eschar in scrub typhus is useful for initiation of prompt and appropriate antibiotic therapy.  METHODS: The distribution of eschars in all children <15 years of age admitted with confirmed scrub typhus over a 5 year period is described.  RESULTS: Of 431 children admitted with scrub typhus, eschars were present in 176 (40.8%) children with the following distribution: head, face and neck, 33 (19.1%); axillae, 37 (21%); chest and abdomen, 21 (11.9%); genitalia, inguinal region and buttocks, 58 (33%); back, 8 (4.5%); upper extremities, 13 (7.4%); and lower extremities, 5 (2.8%). The commonest sites of eschars were scrotum (27 of 106; 25.5%) and axillae (15 of 106; 14.2%) in males and axillae (22 of 70; 31.4%) and groin (16 of 70; 22.9%) in females. Eschars were seen within skin folds in 100 of 176 (56.8%) children.  CONCLUSION: Children should be carefully examined for the presence of eschar especially in the skin folds of the genitalia, axillae and groin to make an early diagnosis of scrub typhus.  © The Author [2016]. Published by Oxford University Press. All rights reserved. For Permissions, please email: journals.permissions@oup.com.  DOI: 10.1093/tropej/fmw027 | **INTL** | **JUL TO DEC** | **PMID:**27122479 |
|  | Rouhani S, Peñataro Yori P, Paredes Olortegui M, Siguas Salas M, Rengifo TrigosoD, Mondal D, Bodhidatta L, Platts-Mills J, Samie A, Kabir F, Lima A, Babji S,Mason CJ, Kalam A, Bessong P, Ahmed T, Mduma E, Bhutta ZA, Lima I, Ramdass R,Lang D, George A, Zaidi AK, Kang G, Houpt E, Kosek MN; Etiology, Risk Factors,and Interactions of Enteric Infections and Malnutrition and the Consequences forChild Health and Development Project (MAL-ED) Network Investigators.  Collaborators: Olotegui MP, Chavez CB, Trigoso DR, Flores JT, Vasquez AO, PinedoSR, Acosta AM, Ahmed I, Alam D, Ali A, Bhutta ZA, Qureshi S, Rasheed M, Soofi S,Turab A, Yousafzai AK, Zaidi AK, Bodhidatta L, Mason CJ, Babji S, Bose A,Jennifer MS, John S, Kang G, Kaki S, Koshy B, Muliyil J, Raghava MV, RamachandranA, Rose A, Sharma SL, Thomas RJ, Pan W, Ambikapathi R, Carreon D, Charu V, DaboL, Doan V, Graham J, Hoest C, Knobler S, Lang D, McCormick B, McGrath M, MillerM, Mohale A, Nayyar G, Psaki S, Rasmussen Z, Richard SA, Seidman JC, Wang V,Blank R, Gottlieb M, Tountas KH, Amour C, Mduma E, Swema BM, Yarrot L, Nshama R,Ahmed T, Ahmed AM, Tofail F, Haque R, Hossain I, Islam M, Mahfuz M, Mondal D,Chandyo RK, Shrestha PS, Shrestha R, Ulak M, Black R, Caulfield L, Checkley W,Chen P, Kosek M, Lee G, Yori PP, Murray-Kolb LE, Schaefer B, Pendergast L, AbreuC, Havt A, Costa H, Di Moura A, Filho JQ, Leite Á, Lima A, Lima N, Lima I, MacielB, Moraes M, Mota F, Oriá R, Quetz J, Soares A, Patil CL, Bessong P, Mahopo C,Maphula A, Nesamvuni C, Nyathi E, Samie A, Barrett L, Gratz J, Guerrant R, HouptE, Petri W, Scharf R, Platts-Mills J, Shrestha B, Shrestha SK, Strand T, SvensenE.  Norovirus Infection and Acquired Immunity in 8 Countries: Results From the MAL-EDStudy.  Clin Infect Dis. 2016 May 15;62(10):1210-7. doi: 10.1093/cid/ciw072. Epub 2016Mar 24.  1Johns Hopkins School of Public Health  2Johns Hopkins University, Baltimore, Maryland  3A.B. PRISMA, Iquitos, Peru  4International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b), Dhaka  5Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand  6University of Virginia, Charlottesville  7University of Venda, Thohoyandou, South Africa  8Aga Khan University, Naushahro Feroze, Pakistan  9Universidade Federal do Ceará, Fortaleza, Brazil  10Christian Medical College, Vellore, India  11Haydom Lutheran Hospital, Haydom, Tanzania  12Foundation for the National Institutes of Health, Bethesda, Maryland  Johns Hopkins School of Public Health, and 2 Johns Hopkins University, Baltimore, Maryland; 3 A.B. PRISMA, Iquitos, Peru; 4 International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b), Dhaka; 5 Armed Forces Research Institute of Medical Sciences, Bangkok, Thailand; 6 University of Virginia, Charlottesville; 7 University of Venda, Thohoyandou, South Africa; 8 Aga Khan University, Naushahro Feroze, Pakistan; 9 Universidade Federal do Ceará, Fortaleza, Brazil; 10Christian Medical College, Vellore, India; 11Haydom Lutheran Hospital, Haydom, Tanzania; and 12Foundation for the National Institutes of Health, Bethesda, Maryland  BACKGROUND: Norovirus is an important cause of childhood diarrhea. We present data from a longitudinal, multicountry study describing norovirus epidemiology during the first 2 years of life. METHODS: A birth cohort of 1457 children across 8 countries contributed 7077 diarrheal stools for norovirus testing. A subset of 199 children contributed additional asymptomatic samples (2307) and diarrheal stools (770), which were used to derive incidence rates and evaluate evidence for acquired immunity. RESULTS: Across sites, 89% of children experienced at least 1 norovirus infection before 24 months, and 22.7% of all diarrheal stools were norovirus positive. Severity of norovirus-positive diarrhea was comparable to other enteropathogens, with the exception of rotavirus. Incidence of genogroup II (GII) infection was higher than genogroup I and peaked at 6-11 months across sites. Undernutrition was a risk factor for symptomatic norovirus infection, with an increase in 1 standard deviation of length-for-age z score associated with a 17% reduction (odds ratio, 0.83 [95% confidence interval, .72-.97]; P = .011) in the odds of experiencing diarrhea when norovirus was present, after accounting for genogroup, rotavirus vaccine, and age. Evidence of acquired immunity was observed among GII infections only: Children with prior GII infection were found to have a 27% reduction in the hazard of subsequent infection (hazard ratio, 0.727; P = .010). CONCLUSIONS: The high prevalence of norovirus across 8 sites in highly variable epidemiologic settings and demonstration of protective immunity for GII infections provide support for investment in vaccine development. © The Author 2016. Published by Oxford University Press for the Infectious Diseases Society of America. DOI: 10.1093/cid/ciw072 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4845786  **PMID:**27013692 |
|  | Roy AC(1), Albert S(2), Gouse M(1), Inja DB(1).  Functional outcome of knee arthrodesis with a monorail external fixator.  Strategies Trauma Limb Reconstr. 2016 Apr;11(1):31-5. doi:10.1007/s11751-016-0247-5. Epub 2016 Feb 20.  **Author information:**  (1)Department of Orthopedics Unit-1, CMC, Vellore, India. (2)Department of Orthopedics Unit-1, CMC, Vellore, India. [sandeepalbertor@gmail.com](mailto:sandeepalbertor@gmail.com).  Several methods for obtaining knee arthrodesis have been described in the literature and world; over, the commonest cause for arthrodesis is a failed arthroplasty. Less commonly, as in this series, post-infective or traumatic causes may also require a knee fusion wherein arthroplasty may not be indicated. We present salient advantages along with the radiological and functional outcome of twenty four patients treated with a single monorail external fixator. All patients went on develop fusion at an average of 5.4 months with an average limb length discrepancy of 3 cm (1.5-6 cm). Improvements in functional outcome as assessed by the lower extremity functional score (LEFS), and the SF-36 was significant (p = 0.000). Knee arthrodesis with a single monorail external fixator is a reasonable single-staged salvage option in patients wherein arthroplasty may not be the ideal choice. The outcome, though far from ideal, is definitely positive and predictable. DOI: 10.1007/s11751-016-0247-5 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4814381  **PMID:**26897382 |
|  | Rupa V(1), Isaac R(2), Rebekah G(3), Manoharan A(4).  Association of Streptococcus pneumoniae nasopharyngeal colonization and otherrisk factors with acute otitis media in an unvaccinated Indian birth cohort.  Epidemiol Infect. 2016 Jul;144(10):2191-9. doi: 10.1017/S0950268816000248. Epub2016 Mar 2.  **Author information:**  (1)Department of ENT,Christian Medical College,Vellore,India. (2)Rural Unit for Health and Social Affairs,Christian Medical College,Vellore,India. (3)Department of Biostatistics,Christian Medical College,Vellore,India. (4)Department of Medicine (Infectious Diseases Unit),Christian Medical College,Vellore,India.  In order to study the epidemiology of acute otitis media (AOM) and Streptococcus pneumoniae nasopharyngeal colonization in the first 2 years of life, we followed up an unvaccinated birth cohort monthly and at visits when sick, with otoscopy to detect AOM and performed nasopharyngeal swabbing to detect S. pneumoniae. Serotyping of positive cultures was also performed. Of 210 babies who were enrolled at birth, 61 (29·05%) experienced 128 episodes of AOM [relative risk 2·63, 95% confidence interval (CI) 1·21-5·75] with maximum incidence in the second half of the first year of life. Episodes ranged from 1 to 7 (mean 2·1 episodes). Most (86·9%) babies with AOM had a positive culture swab giving an odds ratio (OR) of 1·93 (95% CI 1·03-3·62, P = 0·041) for this association. Other risk factors identified for AOM were winter season (OR 3·46, 95% CI 1·56-7·30, P = 0·001), upper respiratory infection (OR 2·43, 95% CI 1·43-4·51, P = 0·005); residents of small households were less likely to develop AOM (OR 0·32, 95% CI 0·17-0·57, P < 0·01). Common S. pneumoniae serotypes isolated during episodes were 19, 6, 15, 35, 7, 23, 9 and 10 which indicated a theoretical coverage for pneumococcal vaccines PCV10 and PCV13 constituent serotypes of 62·8%. We conclude that AOM in Indian infants is often associated with S. pneumoniae colonization of the nasopharynx as well as other risk factors.  DOI: 10.1017/S0950268816000248 | **INTL** | **JUL TO DEC** | **PMID:**26931207 |
|  | Sabapathy V(1), Kumar S(1).  hiPSC-derived iMSCs: NextGen MSCs as an advanced therapeutically active cellresource for regenerative medicine.  J Cell Mol Med. 2016 Aug;20(8):1571-88. doi: 10.1111/jcmm.12839. Epub 2016 Apr21.  **Author information:**  (1)Center for Stem Cell Research, A Unit of inStem Bengaluru, Christian Medical College, Vellore, Tamil Nadu, India.  Mesenchymal stem cells (MSCs) are being assessed for ameliorating the severity of graft-versus-host disease, autoimmune conditions, musculoskeletal injuries and cardiovascular diseases. While most of these clinical therapeutic applications require substantial cell quantities, the number of MSCs that can be obtained initially from a single donor remains limited. The utility of MSCs derived from human-induced pluripotent stem cells (hiPSCs) has been shown in recent pre-clinical studies. Since adult MSCs have limited capability regarding proliferation, the quantum of bioactive factor secretion and immunomodulation ability may be constrained. Hence, the alternate source of MSCs is being considered to replace the commonly used adult tissue-derived MSCs. The MSCs have been obtained from various adult and foetal tissues. The hiPSC-derived MSCs (iMSCs) are transpiring as an attractive source of MSCs because during reprogramming process, cells undergo rejuvination, exhibiting better cellular vitality such as survival, proliferation and differentiations potentials. The autologous iMSCs could be considered as an inexhaustible source of MSCs that could be used to meet the unmet clinical needs. Human-induced PSC-derived MSCs are reported to be superior when compared to the adult MSCs regarding cell proliferation, immunomodulation, cytokines profiles, microenvironment modulating exosomes and bioactive paracrine factors secretion. Strategies such as derivation and propagation of iMSCs in chemically defined culture conditions and use of footprint-free safer reprogramming strategies have contributed towards the development of clinically relevant cell types. In this review, the role of iPSC-derived mesenchymal stromal cells (iMSCs) as an alternate source of therapeutically active MSCs has been described. Additionally, we also describe the role of iMSCs in regenerative medical applications, the necessary strategies, and the regulatory policies that have to be enforced to render iMSC's effectiveness in translational medicine.  © 2016 The Authors. Journal of Cellular and Molecular Medicine published by John Wiley & Sons Ltd and Foundation for Cellular and Molecular Medicine.  DOI: 10.1111/jcmm.12839 | **INTL** | **JUL TO DEC** | **PMCID: PMC**4956943  **PMID:**27097531 |
|  | Sabapathy V, Kumar S(1).  Quest for alternate personalized clinical source of MSCs: Advancing towardshiPSCs derived iMSCs.  Curr Stem Cell Res Ther. 2016;11(2):99-113.  **Author information:**  (1)Centre for Stem Cell Research, Christian Medical College, Bagayam, Vellore - 632002, Tamil Nadu, India. skumar@cmcvellore.ac.in.  The Human mesenchymal stromal/stem cells (MSCs) have been isolated from various tissue sources. Yet, the lack of a distinctive marker for identifying in vivo MSCs in their tissue niche has hampered the MSC's in vivo behavior tracking and compared that to the in vitro expanded cultures. In this review, we present a comprehensive report on MSCs history, isolation from assorted tissue sources, classification, long-term cultures for comprehensively characterized MSCs, immunomodulation, regenerative medical applications, iMSCs as a novel source of patient-specific iPSCs and scaleup strategies for translational applications. We have emphasized on prenatal tissue-derived MSCs and iMSCs derived from hiPSCs as an effective alternative to adult MSCs. We also highlight the urgent requirement to revisit the initial criteria laid down by International Society for Cellular Therapy (ISCT) and propose more stringent criteria to define, identify and exclusively characterize the MSCs derived from various tissue sources using advanced molecular tools; also more international workshops are necessary for delineating unique features of MSCs. Unless the proposed goal is achieved, it is extremely difficult to realize the full potential of MSCs in translational applications. Although numerous patients have been tested with MSCs to date, no immediate adverse outcomes or infusion-related toxicity has been reported, suggesting MSCs infusion to be safe. However, rare adverse event and late complications of the treatment may be detected in large cohorts of patients with long-term follow-up. | **INTL** | **JAN TO JUN** | **PMID:**26521972 |
|  | Sachithanandham J(1), Konda Reddy K(2), Solomon K(1), David S(1), Kumar Singh S(2), Vadhini Ramalingam V(1), Alexander Pulimood S(3), Cherian Abraham O(4), Rupali P(4), Sridharan G(5), Kannangai R(1).  Effect of HIV-1 Subtype C integrase mutations implied using molecular modeling and docking data.  Bioinformation. 2016 Jun 15;12(3):221-230. doi: 10.6026/97320630012221. eCollection 2016.  **Author information:**  (1)Departments of Clinical Virology Alagappa University, Karaikudi, Tamil Nadu, India. (2)SNHRC Vellore and Computer-Aided Drug Design and Molecular Modeling Lab, Department of Bioinformatics Alagappa University, Karaikudi, Tamil Nadu, India. (3)Departments of Dermatology, Alagappa University, Karaikudi, Tamil Nadu, India. (4)Departments of Internal Medicine, Alagappa University, Karaikudi, Tamil Nadu, India. (5)Christian Medical College, Vellore, Sri Sakthi Amma Institute of Biomedical Research Institute.  The degree of sequence variation in HIV-1 integrase genes among infected patients and their impact on clinical response to Anti retroviral therapy (ART) is of interest. Therefore, we collected plasma samples from 161 HIV-1 infected individuals for subsequent integrase gene amplification (1087 bp). Thus, 102 complete integrase gene sequences identified as HIV-1 subtype-C was assembled. This sequence data was further used for sequence analysis and multiple sequence alignment (MSA) to assess position specific frequency of mutations within pol gene among infected individuals. We also used biophysical geometric optimization technique based molecular modeling and docking (Schrodinger suite) methods to infer differential function caused by position specific sequence mutations towards improved inhibitor selection. We thus identified accessory mutations (usually reduce susceptibility) leading to the resistance of some known integrase inhibitors in 14% of sequences in this data set. The Stanford HIV-1 drug resistance database provided complementary information on integrase resistance mutations to deduce molecular basis for such observation. Modeling and docking analysis show reduced binding by mutants for known compounds. The predicted binding values further reduced for models with combination of mutations among subtype C clinical strains. Thus, the molecular basis implied for the consequence of mutations in different variants of integrase genes of HIV-1 subtype C clinical strains from South India is reported. This data finds utility in the design, modification and development of a representative yet an improved inhibitor for HIV-1 integrase. DOI: 10.6026/97320630012221 | **INT** | **JAN TO JUN** | PMID: 28149058  PMCID: PMC5267967 |
|  | Saha A(1), Shanthi F X M(1), Winston A B(1), Das S(2), Kumar A(1), Michael JS(1),Balamugesh T(1).  Prevalence of Hepatotoxicity From Antituberculosis Therapy: A Five-YearExperience From South India.  J Prim Care Community Health. 2016 Jul;7(3):171-4. doi: 10.1177/2150131916642431.Epub 2016 Apr 7.  **Author information:**  (1)Christian Medical College, Vellore, Tamil Nadu, India. (2)Christian Medical College, Vellore, Tamil Nadu, India saibaldas123@gmail.com.  BACKGROUND: Antituberculosis (ATT) drug-induced liver injury (DILI) is a common and serious adverse effect of tuberculosis (TB) treatment. This retrospective study was carried out to study the prevalence of DILI among patients who had received anti-TB medications and to study some of the known risk factors responsible for causing DILI.  MATERIALS AND METHODS: This longitudinal descriptive study was performed to evaluate cases of DILI with predefined criteria. Patients of all ages, diagnosed and treated for smear positive pulmonary TB from January 1, 2008 to December 31, 2012 and those who came for regular follow-up were included in the study. Multiple logistic regression analysis was performed to determine the association of different risk factors and DILI. The confounders considered were age, sex, weight, body mass index, doses of drugs (fixed or per kg), ATT regimens (daily or intermittent), and treatment categories.  RESULTS: Of the 253 patients analyzed, 24 (9.48%) developed DILI. Associations of different risk factors were insignificant; including chronic alcohol consumption, hepatitis B infection, hepatitis C infection, HIV infection, and existing chronic TB.  CONCLUSION: DILI was not significantly associated with known risk factors in our settings.  © The Author(s) 2016.  DOI: 10.1177/2150131916642431 | **INTL** | **JUL TO DEC** | **PMID:**27056794 |
|  | Sahni RD(1), Amalanathan R(1), Devanga Ragupathi NK(1), Mathai J(2),Veeraraghavan B(1), Biswas I(3).  Complete Genome Sequence of Serratia marcescens U36365, a Green Pigment-ProducingStrain Isolated from a Patient with Urinary Tract Infection.  Genome Announc. 2016 Aug 11;4(4). pii: e00837-16. doi: 10.1128/genomeA.00837-16.  **Author information:**  (1)Department of Clinical Microbiology, Christian Medical College, Vellore, Tamil Nadu, India. (2)Department of Pediatric Surgery, Christian Medical College, Vellore, Tamil Nadu, India. (3)Department of Clinical Microbiology, Christian Medical College, Vellore, Tamil Nadu, India Department of Microbiology, Molecular Genetics and Immunology, University of Kansas Medical Center, Kansas City, Kansas, USA ibiswas@kumc.edu.  Serratia marcescens is an emerging nosocomial pathogen associated with urinary and respiratory tract infections. In this study, we determined the genome of a green pigment-producing clinical strain, U36365, isolated from a hospital in Southern India. De novo assembly of PacBio long-read sequencing indicates that the U36365 genome consists of a chromosome of 5.12 Mbps and no plasmids.  Copyright © 2016 Sahni et al.  DOI: 10.1128/genomeA.00837-16 | **INTL** | **JUL TO DEC** | **PMCID: PMC**4982302  **PMID:**27516523 |
|  | Sajan JE(1), John JA(1), Grace P(1), Sabu SS(1), Tharion G(1).  Wii-based interactive video games as a supplement to conventional therapy forrehabilitation of children with cerebral palsy: A pilot, randomized controlledtrial.  Dev Neurorehabil. 2016 Nov 15:1-7. [Epub ahead of print]  **Author information:**  (1)a Department of Physical Medicine and Rehabilitation , Christian Medical College , Vellore , India.  OBJECTIVE: To assess the effect of interactive video gaming (IVG) with Nintendo Wii (Wii) supplemented to conventional therapy in rehabilitation of children with cerebral palsy (CP).  DESIGN: Randomized, controlled, assessor-blinded study.  PARTICIPANTS: Children with CP; 10 children each in the control and intervention groups.  INTERVENTION: IVG using Wii, given as a supplement to conventional therapy, for 45 min per day, 6 days a week for 3 weeks. The children in the control group received conventional therapy alone.  OUTCOME MEASURES: Posture control and balance, upper limb function, visual-perceptual skills, and functional mobility.  RESULTS: Significant improvement in upper limb functions was seen in the intervention group but not in the control group. Improvements in balance, visual perception, and functional mobility were not significantly different between control and intervention groups.  CONCLUSIONS: Wii-based IVG may be offered as an effective supplement to conventional therapy in the rehabilitation of children with CP.  DOI: 10.1080/17518423.2016.1252970 | **INTL** | **JUL TO DEC** | **PMID:**27846366 |
|  | Salas A(1), Acosta D(2), Ferri CP(3), Guerra M(4), Huang Y(5), Jacob KS(6),Jimenez-Velazquez IZ(7), Llibre Rodriguez JJ(8), Sosa AL(9), Uwakwe R(10),Williams JD(11), Jotheeswaran AT(12), Liu Z(5), Lopez Medina AM(13),Salinas-Contreras RM(9), Prince MJ(14).  The Prevalence, Correlates, Detection and Control of Diabetes among Older Peoplein Low and Middle Income Countries. A 10/66 Dementia Research GroupPopulation-Based Survey.  PLoS One. 2016 Feb 25;11(2):e0149616.  doi: 10.1371/journal.pone.0149616.eCollection 2016.  **Author information:**  (1)Medicine Department, Caracas University Hospital, Faculty of Medicine, Universidad Central de Venezuela, Caracas, Venezuela. (2)Universidad Nacional Pedro Henriquez Ureña (UNPHU), Internal Medicine Department, Geriatric Section, Santo Domingo, Dominican Republic. (3)Universidade Fedral de São Paulo, Department of Psychobiology, Sao Paulo, Brasil. (4)Psychogeriatric Unit, National Institute of Mental Health "Honorio Delgado Hideyo Noguchi", Lima, Peru. (5)Peking University, Institute of Mental Health, Beijing, China. (6)Christian Medical College, Vellore, India. (7)Internal Medicine Dept., Geriatrics Program, School of Medicine, Medical Sciences Campus, University of Puerto Rico, San Juan, Puerto Rico. (8)Facultad de Medicina Finlay-Albarran, Medical University of Havana, Havana, Cuba. (9)National Institute of Neurology and Neurosurgery of Mexico, National Autonomous University of Mexico, Mexico City, Mexico. (10)Nnamdi Azikiwe University Teaching Hospital, Nnewi, Anambra State, Nigeria. (11)Department of Community Health, Voluntary Health Services, Chennai, India. (12)Public Health Foundation of India, New Delhi, India. (13)Policlinico 19 de abril, Plaza, La Habana, Cuba. (14)King's College London, Institute of Psychiatry, Health Service and Population Research Department, London, United Kingdom.  BACKGROUND: Little is known of the epidemiology of diabetes among older people in low and middle income countries. We aimed to study and compare prevalence, social patterning, correlates, detection, treatment and control of diabetes among older people in Latin America, India, China and Nigeria. METHODS: Cross-sectional surveys in 13 catchment area sites in nine countries. Diagnosed diabetes was assessed in all sites through self-reported diagnosis. Undiagnosed diabetes was assessed in seven Latin American sites through fasting blood samples (glucose > = 7 mmol/L). RESULTS: Total diabetes prevalence in catchment sites in Cuba (prevalence 24.2%, SMR 116), Puerto Rico (43.4%, 197), and urban (27.0%, 125), and rural Mexico (23.7%, 111) already exceeds that in the USA, while that in Venezuela (20.9%, 100) is similar. Diagnosed diabetes prevalence varied very widely, between low prevalences in sites in rural China (0.9%), rural India (6.6%) and Nigeria (6.0%). and 32.1% in Puerto Rico, explained mainly by access to health services. Treatment coverage varied substantially between sites. Diabetes control (40 to 61% of those diagnosed) was modest in the Latin American sites where this was studied. Diabetes was independently associated with less education, but more assets. Hypertension, central obesity and hypertriglyceridaemia, but not hypercholesterolaemia were consistently associated with total diabetes. CONCLUSIONS: Diabetes prevalence is already high in most sites. Identifying undiagnosed cases is essential to quantify population burden, particularly in least developed settings where diagnosis is uncommon. Metabolic risk factors and associated lifestyles may play an important part in aetiology, but this requires confirmation with longitudinal data. Given the high prevalence among older people, more population research is indicated to quantify the impact of diabetes, and to monitor the effect of prevention and health system strengthening on prevalence, treatment and control. DOI: 10.1371/journal.pone.0149616 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4767439  **PMID:**26913752 |
|  | Saluja T(1), Dhingra MS(2), Sharma SD(3), Gupta M(4), Kundu R(5), Kar S(6), DuttaAK(7), Silveira MD(8), Singh JV(9), Kamath VG(10), Chaudhary A(11), Rao V(12),Ravi MD(13), Murthy K(14), Arumugam R(15), Moureau A(16), Prasad R(1), PatnaikBN(1).  Association of rotavirus strains and severity of gastroenteritis in Indianchildren.  Hum Vaccin Immunother. 2016 Sep 29:1-6. [Epub ahead of print]  **Author information:**  (1)a Shantha Biotechnics Pvt. Ltd. , Hyderabad , India. (2)b Sanofi Pasteur , Swiftwater , PA , USA. (3)c SMS Medical College , Jaipur , India. (4)d Postgraduate Institute of Medical Education and Research , Chandigarh , India. (5)e Institute of Child Health , Kolkata , India. (6)f Kalinga Institute of Medical Sciences , Bhubaneswar , India. (7)g School of Medical Sciences and Research, Sharda University , Noida , India. (8)h Govt. Medical College , Goa , India. (9)i CSM Medical University , Lucknow , India. (10)j Kasturba Medical College , Manipal , India. (11)k Dayanand Medical College , Ludhiana , India. (12)l Gandhi Medical College , Hyderabad , India. (13)m JSS Medical College and Hospital , Mysore , India. (14)n Kempegowda Institute of Medical Sciences , Bangalore , India. (15)o Christian Medical College , Vellore , India. (16)p Sanofi Pasteur , Lyon , France.  Rotavirus is the leading cause of severe and dehydrating diarrhea in children aged under 5 years. We undertook this hospital-based surveillance study to examine the possible relationship between the severity of diarrhea and the various G-group rotaviruses circulating in India. Stool samples (n = 2,051) were systematically collected from 4,711 children aged <5 years admitted with severe acute gastroenteritis to 12 medical school centers from April 2011 to July 2012. Rotavirus testing was undertaken using a commercially available enzyme immunoassay kit for the rotavirus VP6 antigen (Premier Rotaclone Qualitative ELISA). Rotavirus positive samples were genotyped for VP7 and VP4 antigens by reverse-transcription polymerase chain reaction at a central laboratory. Of the stool samples tested for rotavirus antigen, 541 (26.4%) were positive for VP6 antigen . Single serotype infections from 377 stool samples were compared in terms of gastroenteritis severity. Among those with G1 rotavirus infection, very severe diarrhea (Vesikari score ≥ 16) was reported in 59 (33.9%) children, severe diarrhea (Vesikari score 11-15) in 104 (59.8%), moderate (Vesikari score 6-10) and mild diarrhea (Vesikari score 0-5) in 11 (6.3%). Among those with G2 infection, very severe diarrhea was reported in 26 (27.4%) children, severe diarrhea in 46 (48.4%), and moderate and mild diarrhea in 23 (24.2 %). Among those with G9 infection, very severe diarrhea was reported in 47 (54.5%) children, severe diarrhea in 29 (33.6%), and moderate and mild diarrhea in 10 (11.9%). Among those with G12 infection, very severe diarrhea was reported in 9 (40.9%) children and severe diarrhea in 13 (59.1%). The results of this study indicate some association between rotavirus serotypes and severity of gastroenteritis.  DOI: 10.1080/21645515.2016.1238994 | **INTL** | **JUL TO DEC** | **PMID:**27686522 |
|  | Samuel R(1), Russell PS(2), Paraseth TK(2), Ernest S(2), Jacob KS(2).  Development and validation of the Vellore Occupational Therapy Evaluation Scaleto assess functioning in people with mental illness.  Int J Soc Psychiatry. 2016 Aug 26. pii: 0020764016664754. [Epub ahead of print]  **Author information:**  (1)Department of Psychiatry, Christian Medical College, Vellore, India reemasamuel@cmcvellore.ac.in. (2)Department of Psychiatry, Christian Medical College, Vellore, India.  BACKGROUND: Available occupational therapy assessment scales focus on specific areas of functioning. There is a need for comprehensive evaluation of diverse aspects of functioning in people with mental illness.  AIM: To develop a comprehensive assessment scale to evaluate diverse aspects of functioning among people with mental illness and to assess its validity and reliability.  METHODS: Available instruments, which evaluate diverse aspects of functioning in people with mental illness, were retrieved. Relevant items, which evaluate specific functions, were selected by a committee of mental health experts and combined to form a comprehensive instrument. Face and content validity and feasibility were assessed and the new instrument was piloted among 60 patients with mental illness. The final version of the instrument was employed in 151 consecutive clients, between 18 and 60 years of age, who were also assessed using Global Assessment of Functioning (GAF), Occupational Therapy Task Observation Scale (OTTOS), Social Functioning Questionnaire (SFQ), Rosenberg Self Esteem Scale (RSES) and Pai and Kapur Family Burden Interview Schedule (FBIS) by two therapists. The inter-rater reliability and test-retest reliability of the new  instrument (Vellore Occupational Therapy Evaluation Scale (VOTES)) were also evaluated.  RESULTS: The new scale had good internal consistency (Cronbach's alpha = .817), inter-rater reliability .928 (.877-.958) and test-retest reliability .928 (.868-.961). The correlation between the general behaviour domain (Pearson's Correlation Coefficient [PCC] = -.763, p = .000), task behaviour (PCC = -.829, p = .000), social skills (PCC = -.351, p = .000), intrapersonal skills (PCC = -.208, p = .010), instrumental activities of daily living (IADL) (PCC = -.329, p = .038) and leisure activities (PCC = -.433, p = .005) scores of VOTES with the corresponding domains in the scales used for comparison was statistically significant. The correlation between the total score of VOTES and the total scores of OTTOS, SFQ and RSES was also statistically significant suggesting convergent validity. The correlation between the total score of VOTES with the total score of FBI is not statistically significant, implying good divergent validity.  CONCLUSION: VOTES seems to be a promising tool to assess overall functioning of people with mental illness.  © The Author(s) 2016.  DOI: 10.1177/0020764016664754 | **INTL** | **JUL TO DEC** | **PMID:**27565950 |
|  | Sandhya P(1), Christudoss P(2), Kabeerdoss J(1), Mandal SK(1), Aithala R(1), Mahasampath G(3), Job V(2), Danda D(1).  Diagnostic accuracy of salivary and serum-free light chain assays in primary Sjögren's syndrome: a pilot study.  Int J Rheum Dis. 2016 Dec 30. doi: 10.1111/1756-185X.12965. [Epub ahead of print]  **Author information:**  (1)Department of Clinical Immunology & Rheumatology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. (2)Department of Clinical Biochemistry, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. (3)Department of Biostatistics, Christian Medical College and Hospital, Vellore, Tamil Nadu, India.  OBJECTIVE: To estimate levels of salivary and serum free light chains (FLCs) and explore its utility as a biomarker in primary Sjögren's syndrome (pSS). METHODS: Patients with pSS classified by American European Consensus group 2002 or American College of Rheumatology 2012 criteria between January 2015 and August 2015 were included. Healthy staff and non-first degree relatives of patients constituted controls. Serum and salivary FLCs were measured by immunoturbidometry using FREELITE(™) Human Kappa(κ) and Lambda(λ) Free Kit (Binding site, Birmingham, UK), on a Roche Modular P800. FLCs were compared between cases and controls using the Mann-Whitney U-test. The receiver operator characteristic curve was constructed to analyze the discriminating ability of salivary and serum kappa and lambda FLCs. RESULTS: Salivary and serum FLCs were assayed in 15 patients and 13 patients, respectively, and in 15 controls. Median age of cases and controls was 34 years. Salivary kappa and lambda FLCs were higher in pSS as compared to controls (P < 0.05 and P < 0.001, respectively). Serum kappa and lambda FLCs were also higher in pSS (both P < 0.05). Salivary lambda levels were higher in pSS with ocular signs; serum kappa and lambda levels were higher in those with ocular symptoms. A cut off of ≥ 1.1 mg/L for salivary lambda FLC had a sensitivity and specificity of 73.3% and 93.3%, respectively, for the diagnosis of pSS. Serum kappa FLC ≥ 30 mg/L had a sensitivity and specificity of 92.3% and 73.3%, respectively. CONCLUSION: Serum and salivary FLCs and in particular the latter, are potential biomarkers in pSS. Larger studies are required for validating the findings. © 2016 Asia Pacific League of Associations for Rheumatology and John Wiley & Sons Australia, Ltd.  DOI: 10.1111/1756-185X.12965 | **INT** | **JUL TO DEC** | PMID: 28036132 |
|  | Sandhya P(1), Danda D(1), Sharma D(2,)(3), Scaria V(2,)(3).  Does the buck stop with the bugs?: an overview of microbial dysbiosis inrheumatoid arthritis.  Int J Rheum Dis. 2016 Jan;19(1):8-20. doi: 10.1111/1756-185X.12728. Epub 2015 Sep19.  **Author information:**  (1)Department of Clinical Immunology and Rheumatology, Christian Medical College, Vellore, Tamil Nadu, India. (2)GN Ramachandran Knowledge Center for Genome Informatics, CSIR Institute of Genomics and Integrative Biology (CSIR-IGIB), Delhi, India. (3)Faculty of Life Sciences, Academy of Scientific and Innovative Research (AcSIR), Delhi, India.  The human body is an environmental niche which is home to diverse co-habiting microbes collectively referred as the human microbiome. Recent years have seen the in-depth characterization of the human microbiome and associations with diseases. Linking of the composition or number of the human microbiota with diseases and traits date back to the original work of Elie Metchnikoff. Recent advances in genomic technologies have opened up finer details and dynamics of this new science with higher precision. Microbe-rheumatoid arthritis connection, largely related to the gut and oral microbiomes, has showed up as a result - apart from several other earlier, well-studied candidate autoimmune diseases. Although evidence favouring roles of specific microbial species, including Porphyromonas, Prevotella and Leptotricha, has become clearer, mechanistic insights still continue to be enigmatic. Manipulating the microbes by traditional dietary modifications, probiotics, and antibiotics and by currently employed disease-modifying agents seems to modulate the disease process and its progression. In the present review, we appraise the existing information as well as the gaps in knowledge in this challenging field. We also discuss the future directions for potential clinical applications, including prevention and management of rheumatoid arthritis using microbial modifications. © 2015 Asia Pacific League of Associations for Rheumatology and Wiley Publishing Asia Pty Ltd. DOI: 10.1111/1756-185X.12728 | **INTL** | **JAN TO JUN** | **PMID:**26385261 |
|  | Sarkar S(1), Nair BR(1), Rajshekhar V(1).  Complications following central corpectomy in 468 consecutive patients withdegenerative cervical spine disease.  Neurosurg Focus. 2016 Jun;40(6):E10. doi: 10.3171/2016.3.FOCUS1638.  **Author information:**  (1)Department of Neurological Sciences, Christian Medical College, Vellore, India.  OBJECTIVE This study was performed to describe the incidence and predictors of perioperative complications following central corpectomy (CC) in 468 consecutive patients with cervical spondylotic myelopathy (CSM) or ossification of the posterior longitudinal ligament (OPLL). METHODS The authors performed a retrospective review of a cohort of patients who had undergone surgery for CSM (n = 338) or OPLL (n = 130) performed by a single surgeon over a 15-year period. All patients underwent uninstrumented CC with autologous iliac crest or fibular strut grafting. Preoperative clinical and imaging details were collected, and the type and incidence of complications were studied. Univariate and multivariate analyses were performed to establish risk factors for the development of perioperative complications. RESULTS Overall, 12.4% of patients suffered at least 1 complication following CC. The incidence of major complications was as follows: C-5 radiculopathy, 1.3%; recurrent laryngeal nerve injury, 0.4%; dysphagia, 0.8%; surgical-site infection, 3.4%; and dural tear, 4.3%. There was 1 postoperative death (0.2%). On multivariate analysis, patients in whom the corpectomy involved the C-4 vertebral body (alone or as part of multilevel CC) were significantly more likely to suffer complications (p = 0.004). OPLL and skip corpectomy were risk factors for dural tear (p = 0.015 and p = 0.001, respectively). No factors were found to be significantly associated with postoperative C-5 palsy, dysphagia, or acute graft extrusion on univariate or multivariate analysis. Patients who underwent multilevel CC were predisposed to surgical-site infections, with a slight trend toward statistical significance (p = 0.094). The occurrence of a complication after surgery significantly increased the mean duration of postoperative hospital stay from 5.0 ± 2.3 days to 8.9 ± 6 days (p < 0.001). CONCLUSIONS Complications following CC for CSM or OPLL are infrequent, but they significantly prolong hospital stay. The most frequent complication following CC is dural tear, for which a diagnosis of OPLL and a skip corpectomy are significant risk factors. DOI: 10.3171/2016.3.FOCUS1638 | **INTL** | **JAN TO JUN** | **PMID:**27246480 |
|  | Sarkar S(1), Rajaratnam S(2), Chacko G(3), Mani S(4), Hesargatta AS(2), ChackoAG(5).  Pure endoscopic transsphenoidal surgery for functional pituitary adenomas:outcomes with Cushing's disease.  Acta Neurochir (Wien). 2016 Jan;158(1):77-86; discussion 86. doi:10.1007/s00701-015-2638-7. Epub 2015 Nov 17.  **Author information:**  (1)Sections of Neurosurgery Department of Neurological Sciences, Christian Medical College, Vellore, India. (2)Department of Endocrinology, Diabetes & Metabolism, Christian Medical College, Vellore, India. (3)Neuropathology, Department of Neurological Sciences, Christian Medical College, Vellore, India. (4)Department of Radiodiagnosis, Christian Medical College, Vellore, India. (5)Sections of Neurosurgery Department of Neurological Sciences, Christian Medical College, Vellore, India. [agchacko@cmcvellore.ac.in](mailto:agchacko@cmcvellore.ac.in).  BACKGROUND: This study was performed to examine patient outcomes following pure endoscopic transsphenoidal surgery (ETS) for Cushing's disease (CD). METHOD: We studied 64 consecutive patients who underwent 69 endoscopic transsphenoidal procedures. Radiological evaluation comprised detailed examination of preoperative magnetic resonance images (MRI), including positron emission tomography (PET) for select cases. Inferior petrosal sinus sampling (IPSS) was not performed for any patient. Remission was defined by the presence of hypocortisolemia with requirement for steroid replacement therapy or eucortisolemia with suppression to <1.8 μg/dl after 1 mg dexamethasone on evaluation at least 3 months after surgery. RESULTS: Preoperative MRI was abnormal in 87.5 % of cases and included 11 macroadenomas (17.2 %). PET was used to localize the adenoma in four cases. For microadenomas, operative procedures executed were as follows: selective adenomectomy (n = 15), enlarged adenomectomy (n = 21) and subtotal/hemihypophysectomy (n = 17). Overall, pathological confirmation of an adenoma was possible in 58 patients (90.6 %). Forty-nine patients (76.6 %) developed hypocortisolemia (<5 μg/dl) in the early postoperative period. Mean follow-up was 20 months (range 6-18 months). Remission was confirmed in 79.7 % of the 59 cases followed up for >3 months and was superior for microadenomas (86.4 %) versus macroadenomas (55.6 %) and equivocal MRI adenomas (66.7 %). Postoperative CSF rhinorrhea occurred in five patients, and new endocrine deficits were noted in 17.1 % patients. A nadir postoperative cortisol <2 μg/dl in the 1st week after surgery was highly predictive of remission (p = 0.001). CONCLUSION: ETS allows for enhanced intrasellar identification of adenomatous tissue, providing remission rates that are comparable to traditional microsurgery for CD. The best predictor of remission remains induction of profound Hypocortisolemia in the early postoperative period. DOI: 10.1007/s00701-015-2638-7 | **INTL** | **JAN TO JUN** | **PMID:**26577636 |
|  | Sasi PK(1), Mahapatra S(1), Raj Pallapati SC(1), Thomas BP(1).  Acute Traumatic Musculotendinous Avulsion of the Flexor Pollicis Longus TendonTreated with Primary Flexor Digitorum Superficialis Transfer: A Novel Techniqueof Management.  Case Rep Orthop. 2016;2016:2106203. doi: 10.1155/2016/2106203. Epub 2016 Feb 25.  **Author information:**  (1)Dr. Paul Brand Center for Hand Surgery, Christian Medical College and Hospital, Vellore 632004, India.  Traumatic musculotendinous junction avulsions are rare injuries except in avulsion amputations. They pose a significant challenge to the treating surgeon. We present a 24-year-old male who sustained an open musculotendinous avulsion of the flexor pollicis longus tendon. He was treated with primary tendon transfer using the flexor digitorum superficialis of ring finger, in flexor zone 3. The functional result at 10 months following surgery was excellent. DOI: 10.1155/2016/2106203 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4785255  **PMID:**27019757 |
|  | Sathyakumar K(1), Chandramohan A(1), Masih D(2), Jesudasan MR(3), Pulimood A(2),Eapen A(1).  Best MRI predictors of complete response to neoadjuvant chemoradiation in locallyadvanced rectal cancer.  Br J Radiol. 2016;89(1060):20150328. doi: 10.1259/bjr.20150328. Epub 2016 Feb 1.  **Author information:**  (1)1 Department of Radiology, Christian Medical College, Vellore, Tamil Nadu, India. (2)2 Department of Pathology, Christian Medical College, Vellore, Tamil Nadu, India. (3)3 Department of General and Colorectal Surgery, Unit II, Christian Medical College, Vellore, Tamil Nadu, India.  OBJECTIVE: To identify the MRI parameters which best predict complete response (CR) to neoadjuvant chemoradiotherapy (CRT) in patients with locally advanced rectal cancer (LARC) and to assess their diagnostic performance. METHODS: This was a prospective study of pre- and post-CRT MRI and diffusion-weighted imaging (DWI) of 64 patients with LARC who underwent neoadjuvant CRT and subsequent surgery. Histopathological tumour regression grade was the reference standard. Multivariate regression analysis was performed to identify the best MRI predictors of CR to neoadjuvant CRT, and their diagnostic performance was assessed. RESULTS: The study cohort comprised 48 males and 16 females (n = 64), with mean age of 49.48 ± 14.3 years, range of 23-74 years. 11 patients had pathological complete response. The following factors predicted CR on univariate analysis: low initial (pre-CRT) tumour volume on T2 weighted high-resolution (HR) images and DWI, tumour volume-reduction rate (TVRR) of >95% on DWI and CR on post-CRT DWI (ydwiT0) as assessed by the radiologist. However, the best MRI predictors of CR on multivariate regression analysis were CR on post-CRT DWI (ydwiT0) as assessed by the radiologist and TVRR of >95% on DWI, and these parameters had an area under the curve (95% confidence interval) of 0.881 (0.74-1.0) and 0.843 (0.7-0.98), respectively. The sensitivity, specificity, positive-predictive value, negative-predictive value and accuracy of DWI in predicting CR was 81.8%, 94.3%, 75%, 96.1% and 76%; the sensitivity, specificity and accuracy of TVRR of >95% as a predictor of CR was 80%, 84.1% and 64.1%, respectively; however, this difference was not statistically significant. The interobserver agreement was substantial for ydwiT0. CONCLUSION: Visual assessment of CR on post-CRT DWI and TVRR of >95% on DWI were the best predictors of CR after neoadjuvant CRT in patients with LARC, and the former being more practical can be used in daily practice. ADVANCES IN KNOWLEDGE: In rectal cancer, ydwiT0 as assessed by the radiologist was the best and most practical imaging predictor of CR and scores over standard T2W HR images. DOI: 10.1259/bjr.20150328 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4846192  **PMID:**26828967 |
|  | Sathyakumar S(1), Cherian KE(1), Jebasingh F(1), Hepzhibah J(2), Kapoor N(1),Paul TV(1).  Visual Vignette.  Endocr Pract. 2016 Sep 15. [Epub ahead of print]  **Author information:**  (1)1Department of Endocrinology, Diabetes & Metabolism. (2)2 Department of Nuclear Medicine, Christian Medical College, Vellore, India.  DOI: 10.4158/EP161307.VV | **INTL** | **JUL TO DEC** | **PMID:**27631840 |
|  | Sathyakumar S(1), Cherian KE(2), Shetty S(3), Paul TV(3).  Impact of curative surgery on bone in a patient with osteitis fibrosa cystica ofprimary hyperparathyroidism.  BMJ Case Rep. 2016 Mar 30;2016. pii: bcr2016214970. doi: 10.1136/bcr-2016-214970.  **Author information:**  (1)Department of Endocrinology, Diabetes & Metabolism, Christian Medical College, Vellore, Tamil Nadu, India. (2)Department of Endocrinology, Christian Medical College, Vellore, Tamil Nadu, India. (3)Christian Medical College, Vellore, Tamil Nadu, India.  DOI: 10.1136/bcr-2016-214970 | **INTL** | **JAN TO JUN** | **PMID:**27030464 |
|  | Sathyakumar S(1), Kapoor N(2), Hephzibah J(3), Paul TV(2).  Unusual presentation of Paget's disease of bone.  BMJ Case Rep. 2016 Mar 4;2016. pii: bcr2016214556. doi: 10.1136/bcr-2016-214556.  **Author information:**  (1)Department of Endocrinology, Diabetes Metabolism, Christian Medical College, Vellore, Tamil Nadu, India. (2)Christian Medical College, Vellore, Tamil Nadu, India. (3)Department of Nuclear Medicine, Christian Medical College, Vellore, Tamil Nadu, India.  DOI: 10.1136/bcr-2016-214556 | **INTL** | **JAN TO JUN** | **PMID:**26944376 |
|  | Sato T(1,)(2), Jose J(1,)(3), El-Mawardy M(1), Sulimov DS(1), Tölg R(1), RichardtG(1), Abdel-Wahab M(4).  Predictors of acute scaffold recoil after implantation of the everolimus-elutingbioresorbable scaffold: an optical coherence tomography assessment in nativecoronary arteries.  Int J Cardiovasc Imaging. 2016 Oct 19. [Epub ahead of print]  **Author information:**  (1)Heart Center, Segeberger Kliniken GmbH, Academic Teaching Hospital of the Universities of Kiel, Lübeck and Hamburg, Am Kurpark 1, 23795, Bad Segeberg, Germany. (2)Cardiology, Tachikawa General Hospital, Nagaoaka, Japan. (3)Christian Medical College Hospital, Vellore, India. (4)Heart Center, Segeberger Kliniken GmbH, Academic Teaching Hospital of the Universities of Kiel, Lübeck and Hamburg, Am Kurpark 1, 23795, Bad Segeberg, Germany. mohamed.abdel-wahab@segebergerkliniken.de.  This study investigated the predictors of acute recoil after implantation of everolimus-eluting BRS based on optical coherence tomography (OCT). Thirty-nine patients (56 scaffolds) were enrolled. Acute absolute recoil by quantitative coronary angiography was defined as the difference between the mean diameter of the last inflated balloon (X) and the mean lumen diameter of BRS immediately after balloon deflation (Y). Acute percent recoil was defined as (X - Y) × 100/X. Plaque eccentricity (PE) and plaque composition (PC) were assessed by OCT. PC was classified into two different types: calcific (score = 1), fibrous and lipid (score = 0). Based on the mean acute scaffold recoil value of the present study, scaffolds were divided into two groups: the low acute recoil group (LAR, n = 34) and the high acute recoil group (HAR, n = 22). Acute percent and absolute recoil were 6.4 ± 3.0 % and 0.19 ± 0.11 mm. PE, PC score and scaffold/artery ratio were significantly higher in HAR than in LAR. In multivariate logistic regression analysis, PE > 1.49, PC score (score 1) and scaffold/artery ratio >1.07 were significant positive predictors for the occurrence of acute scaffold recoil (OR 10.7, 95 % CI 2.2-51.4, p < 0.01; OR 5.6, 95 % CI 1.9-22.0, p = 0.04; OR 12.4, 95 % CI 2.6-65.4, p < 0.01, respectively). Acute recoil of BRS is influenced by BRS sizing as well as OCT-derived plaque characteristics.  DOI: 10.1007/s10554-016-0997-7 | **INTL** | **JUL TO DEC** | **PMID:**27761749 |
|  | Sato T(1,)(2), Jose J(1,)(3), El-Mawardy M(1), Sulimov DS(1), Tölg R(1), RichardtG(1), Abdel-Wahab M(4).  Neointimal response to everolimus-eluting bioresorbable scaffolds implanted atbifurcating coronary segments: insights from optical coherence tomography.  Int J Cardiovasc Imaging. 2016 Oct 18. [Epub ahead of print]  **Author information:**  (1)Heart Center, Segeberger Kliniken GmbH, Academic Teaching Hospital of the Universities of Kiel, Lübeck and Hamburg, Am Kurpark 1, 23795, Bad Segeberg, Germany. (2)Department of Cardiology, Tachikawa General Hospital, Nagaoka, Japan. (3)Department of Cardiology, Christian Medical College Hospital, Vellore, India. (4)Heart Center, Segeberger Kliniken GmbH, Academic Teaching Hospital of the Universities of Kiel, Lübeck and Hamburg, Am Kurpark 1, 23795, Bad Segeberg, Germany. mohamed.abdel-wahab@segebergerkliniken.de.  Heterogeneity of neointimal thickness is observed after drug-eluting stents implantation in bifurcation lesions (BL). We evaluated the vascular response of everolimus-eluting bioresorbable scaffold (BRS) struts deployed at BL using optical coherence tomography (OCT). 50 patients (64 scaffolds) underwent follow-up OCT after BRS implantation. Cross-sectional areas of each BL with a side branch more than 1.5 mm were analyzed using OCT every 200 µm. All images were divided into three regions according to shear stress: the 1/2 circumference of the vessel opposite to the ostium (OO), the vessel wall adjacent to the ostium (AO) and the side-branch ostium (SO). The %uncovered strut and the averaged neointimal thickness (NIT) were calculated. Overall, there were significant differences in both NIT and %uncovered strut among the three regions (OO, 119.2 ± 68.5 μm vs. AO, 94.2 ± 35.7 μm vs. SO, 80.5 ± 41.4 μm, p = 0.03; OO, 0.4 %vs. AO, 1.4 %vs. SO, 4.8 %, p = 0.02). Scaffolds were divided into two groups: a large-ratio side-branch group (LRSB; n = 32) and a small-ratio side-branch group (SRSB; n = 32), based on the median value of the ratio of the diameter of side branch ostium (Ds) to that of the main branch (Dm). In the LRSB alone, there were significant differences in both NIT and %uncovered strut among the three regions (OO, 128.0 ± 61.1 μm vs. AO, 97.3 ± 34.3 μm vs. SO, 75.9 ± 39.4 μm, p < 0.01; OO, 0.3 % vs. AO, 2.3 % vs. SO, 8.7 %, p < 0.01). After BRS implantation in BL, neointimal response was pronounced at the vessel wall opposite to the side branch ostium, especially in those with large side branches.  DOI: 10.1007/s10554-016-0993-y | **INTL** | **JUL TO DEC** | **PMID:**27757563 |
|  | Satyanandan C(1), Singh G, Shankar A.  Lockit Plus Catheter Securement Device for Lumbar Subarachnoid Drains.  J Neurosurg Anesthesiol. 2016 Jul;28(3):277. doi: 10.1097/ANA.0000000000000237.  **Author information:**  (1)Department of Anaesthesiology, CMC Vellore, Vellore, Tamil Nadu, India.  DOI: 10.1097/ANA.0000000000000237 | **INTL** | **JUL TO DEC** | **PMID:**26447498 |
|  | Sebastian P(1), Balakrishnan R(1), Yadav B(2), John S(1).  Outcome of radiotherapy for pituitary adenomas.  Rep Pract Oncol Radiother. 2016 Sep-Oct;21(5):466-72. doi:10.1016/j.rpor.2016.06.002. Epub 2016 Jul 15.  **Author information:**  (1)Department of Radiation Oncology, Christian Medical College, Vellore, India. (2)Department of Biostatistics, Christian Medical College, Vellore, India.  AIM: The aim of this study was to analyze the outcome and toxicities and its correlation to patient related and treatment related factors.  BACKGROUND: Pituitary adenomas are treated by radiation therapy (RT) as one of the modalities along with surgery and medical therapy. RT to pituitary adenomas is a challenge due to adjacent dose limiting structures such as optic apparatus and hypothalamus.  MATERIALS AND METHODS: Between January 2004 and December 2010, 94 patients treated for pituitary adenoma with RT who had hospital records of a minimum follow-up of 1 year were included in the analysis. Tests of correlation were done with regards to treatment factors.  RESULTS: Male preponderance was noted in our patient population. Nonfunctioning and functioning tumors were equal in number in this series. Hypopituitarism was associated in 58.5% of patients prior to RT. Radiological tumor progression was seen in one patient (1/94) who had a nonfunctioning tumor. Among functioning tumors, biochemical remission was seen in 93.6% of patients at a median follow-up of 6 years.  CONCLUSIONS: Visual complication was seen in 5.3% of patients and worsening or new onset hypopituitarism was seen in 6.4%. Conventional 3-field technique was associated with significantly more visual complication compared to Stereotactic Radiation Therapy (SRT) technique. Doses ≤50.4 Gy showed a trend of reduced rate of visual and endocrine complications with no compromise in efficacy.  DOI: 10.1016/j.rpor.2016.06.002 | **INTL** | **JUL TO DEC** | **PMCID: PMC**4950161  **PMID:**27489518 |
|  | Sekharappa V(1), Sait A(1).  Simple and Economical Method to Create Thoracolumbar Burst Fracture in a CalfSpine Model.  Asian Spine J. 2016 Feb;10(1):6-13. doi: 10.4184/asj.2016.10.1.6. Epub 2016 Feb16.  **Author information:**  (1)Spinal Disorder Surgery Unit, Department of Orthopaedics, Christian Medical College, Vellore, India.  STUDY DESIGN: Calf spine model study. PURPOSE: To describe a technique of creating thoracolumbar burst fractures in calf spine model by low weight drop weight. OVERVIEW OF LITERATURE: Burst fractures are one of the commonest types of thoracolumbar fractures and their treatment is controversial. Biomechanical studies aid in the decision of treatment of these fractures. A simple method of creation of burst fractures would help these biomechanical studies. METHODS: Ten specimens of thoracolumbar spines harvested from 6-8 week old calves were weakened at the target vertebra by standardized osteotomy cuts. Burst fractures were created by dropping a 5-kg of weight from a height of 1.2 m using an in-house device. An accelerometer attached to the weight measured the acceleration at the point of impact. RESULTS: Average weight and bone mineral density of the specimens was 390 g and 0.67 g/cm(2), respectively. Computed tomography scan analysis of the fractures revealed McCormack grade 2 and grade 3 fractures in 5 and 3 specimens, respectively, Dennis type 2B in 4, type 2A burst fractures in 5 specimens and fracture dislocation in 1 specimen, AO type A3.1.1 in 4 specimens, type A3.2.2 in 4 and type A3.3.3 in 2 specimens. Vertical laminar split fracture was seen in 6 specimens. Average acceleration and energy at impact was 9.04 m/sec and 54.24 Nm, respectively. CONCLUSIONS: We describe a technique to create thoracolumbar burst fractures in calf spine by a drop weight method using a device that is simple to operate and easy to construct. The method is consistent and produces fractures similar to those occurring naturally, and can be considered as an alternative method for creating burst fractures in biomechanical studies. DOI: 10.4184/asj.2016.10.1.6 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4764542  **PMID:**26949452 |
|  | Sen I(1), Stephen E(2), Agarwal S(2), Rebekah G(3), Nair SC(4).  Analytical performance of a point-of-care device in monitoring patients on oralanticoagulation with vitamin K antagonists.  Phlebology. 2016 Oct;31(9):660-7. doi: 10.1177/0268355515608569. Epub 2015 Sep27.  **Author information:**  (1)Department of Vascular Surgery, Christian Medical College, Vellore, India dr.indranisen@gmail.com. (2)Department of Vascular Surgery, Christian Medical College, Vellore, India. (3)Department of Biostatistics, Christian Medical College, Vellore, India. (4)Transfusion Medicine and Immunohaematoloy, Christian Medical College, Vellore, India.  BACKGROUND: [Please check the following sentence for clarity: "Point-of-care devices measuring international normalized ratio have clinical appeal, reports of 'off-label' in-hospital/primary care use report improved time to intervention/dose adjustment."]Point-of-care devices measuring international normalized ratio have clinical appeal, reports of 'off-label' in-hospital/primary care use report improved time to intervention/dose adjustment. We evaluated the accuracy and precision of a device for such multiple patient use compared to a reference laboratory.  METHODS: The point-of-care international normalized ratio result of patients on oral anticoagulation at the Vascular Surgery clinic was compared to the reference to check for statistical and clinical correlation. This was a prospective case-control study design with sample size calculated for sensitivity of 87.5%, precision 5% and desired confidence level 95%.  RESULTS: There were 168 patients tested; 55% were male, the mean age was 45.4. Sixty per cent were in the target international normalized ratio range. Tests were done for statistical and clinical correlation. The international normalized ratio range using the point-of-care device was 0.8-7.5 (reference lab 0.8-10), mean international normalized ratio was 2.22 ± 1.6 (point-of-care device) compared to 2.46 ± 1.3 (reference lab). The mean absolute difference was 0.79 ± 0.92 and the mean relative difference was 8.1% ± 1.03. Data was analysed using a Bland-Altman plot yielding a mean of 0.738 (standard deviation 0.92). Concordance between the tests was 75% with r2 = 0.52 on linear regression. Using an error grid plot, excellent clinical correlation was seen in 63.8%. In 5.4% major corrective action was needed but potentially missed if relying on the point-of-care device.  CONCLUSION: The accuracy and precision of this point-of-care device is moderate. It may have potential utility only where access to a reference lab is difficult.  © The Author(s) 2015.  DOI: 10.1177/0268355515608569 | **INTL** | **JUL TO DEC** | **PMID:**26415605 |
|  | Sen S(1), Ramakant P(1), Paul MJ(1), Jennifer A(2).  Acute suppurative thyroiditis secondary to urinary tract infection by E. coli: arare clinical scenario.  BMJ Case Rep. 2016 Jan 13;2016. pii: bcr2015213231. doi: 10.1136/bcr-2015-213231.  **Author information:**  (1)Department of Endocrine Surgery, Christian Medical College, Vellore, Tamil Nadu, India. (2)Department of Pathology, Christian Medical College, Vellore, Tamil Nadu, India.  A 60-year-old woman with diabetes and symptomatic urinary tract infection presented to us with a painful neck swelling for 2 weeks. We discuss diagnostic and management issues in acute suppurative thyroiditis caused by Escherichia coli. 2016 BMJ Publishing Group Ltd. DOI: 10.1136/bcr-2015-213231 | **INTL** | **JAN TO JUN** | **PMID:**26762349 |
|  | Sen S(1), Thomas A(2), Das S(1), Dey JK(1), Peedicayil A(2), Thomas V(2), Peedicayil J(1).  Inhibition by tadalafil of contractility of isolated nonpregnant human myometrium.  J Pharmacol Pharmacother. 2016 Oct-Dec;7(4):177-181. doi: 10.4103/0976-500X.195902.  **Author information:**  (1)Department of Pharmacology and Clinical Pharmacology, Christian Medical College, Vellore, Tamil Nadu, India. (2)Division of Obstetrics and Gynaecology, Christian Medical College, Vellore, Tamil Nadu, India.  OBJECTIVE: To investigate the inhibitory effect of tadalafil on the contractility of isolated nonpregnant human myometrium. MATERIALS AND METHODS: The ability of tadalafil (25, 40, and 63 μM) to inhibit 55 mM KCl-induced contractility of isolated nonpregnant human myometrium was studied. The ability of the ATP-sensitive potassium channel blocker glibenclamide (10 μM) and the calcium-sensitive potassium channel (BKCa) blocker iberiotoxin (100 nM) to reverse the inhibitory effect of 40 μM tadalafil on 55 mM KCl-induced myometrial contractility was also studied. RESULTS: Tadalafil produced a concentration-dependent inhibition of myometrial contractility that was statistically significant at 40 and 63 μM concentrations of tadalafil. The inhibition by tadalafil of myometrial contractility was statistically significantly reversed by the concurrent administration of glibenclamide and iberiotoxin. CONCLUSIONS: These results suggest that tadalafil inhibits human myometrial contractility by opening ATP-sensitive potassium channels and BKCa channels. The opening of these channels could have been due to the action of raised intracellular levels of cGMP due to inhibition of PDE-5 by tadalafil. The results suggest that tadalafil could be investigated for use in clinical conditions requiring relaxation of the myometrium. DOI: 10.4103/0976-500X.195902 | **INT** | **JUL TO DEC** | PMID: 28163539 |
|  | Shalimar(1), Saraswat V(2), Singh SP(3), Duseja A(4), Shukla A(5), Eapen CE(6),Kumar D(7), Pandey G(2), Venkataraman J(8), Puri P(9), Narayanswami K(7), DhimanRK(4), Thareja S(7), Nijhawan S(10), Bhatia S(5), Zachariah U(6), Sonika U(1),Varghese T(11), Acharya SK(12).  Acute-on-chronic liver failure in India: The Indian National Association forStudy of the Liver consortium experience.  J Gastroenterol Hepatol. 2016 Oct;31(10):1742-1749. doi: 10.1111/jgh.13340.  **Author information:**  (1)Department of Gastroenterology, All India Institute of Medical Sciences, New Delhi, India. (2)Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, India. (3)S.C.B Medical College, Cuttack, India. (4)Postgraduate Institute of Medical Education and Research, Chandigarh, India. (5)Seth GS Medical College and KEM Hospital, Mumbai, India. (6)Christian Medical College, Vellore, India. (7)Army Hospital Research and Referral, New Delhi, India. (8)Global hospital, Chennai, India. (9)Madras Medical College, Chennai, India. (10)SMS Medical College, Jaipur, India. (11)Medical College Hospital, Calicut, India. (12)Department of Gastroenterology, All India Institute of Medical Sciences, New Delhi, India. subratacharya2004@yahoo.com.  BACKGROUND AND AIM: The aim of this study was to analyze etiologies and frequency of hepatic and extrahepatic organ failures (OFs) and outcome of acute-on-chronic liver failure (ACLF) at 10 tertiary centers in India.  METHODS: In this retrospective study (2011-2014), patients satisfying Asian Pacific Association for the Study of the Liver definition of ACLF were included. Etiology of acute precipitating insult and chronic liver disease and outcomes were assessed. Occurrence and severity of OF were assessed by chronic liver failure-sequential organ failure assessment score.  RESULTS: The mean (±SD) age of 1049 consecutive ACLF patients was 44.7 ± 12.2 years; Eighty-two percent were men. Etiology of acute precipitants included alcohol 35.7%, hepatitis viruses (hepatitis A, hepatitis B, and hepatitis E) 21.4%, sepsis 16.6%, variceal bleeding 8.4%, drugs 5.7%, and cryptogenic 9.9%. Among causes of chronic liver disease, alcohol was commonest 56.7%, followed by cryptogenic and hepatitis viruses. Predictors of survival were analyzed for a subset of 381 ACLF patients; OF's liver, renal, coagulation, cerebral, respiratory, and failure were seen in 68%, 32%, 31.5%, 22.6%, 14.5%, and 15%, respectively. Fifty-seven patients had no OF, whereas 1, 2, 3, 4, and 5 OFs were recorded in 126, 86, 72, 28, and 12 patients, respectively. The mortality increased progressively with increasing number of OFs (12.3% with no OF, 83.3% with five OFs). During a median hospital stay of 8 days, 42.6% (447/1049) of patients died. On multivariate analysis by Cox proportional hazard model, elevated serum creatinine (hazard ratio [HR] 1.176), advanced hepatic encephalopathy (HR 2.698), and requirement of ventilator support (HR 2.484) were independent predictors of mortality.  CONCLUSIONS: Alcohol was the commonest etiology of ACLF. Within a mean hospital stay of 8 days, 42% patients died. OFs independently predicted survival.  © 2016 Journal of Gastroenterology and Hepatology Foundation and John Wiley & Sons Australia, Ltd.  DOI: 10.1111/jgh.13340 | **INTL** | **JUL TO DEC** | **PMID:**26989861 |
|  | Shankar C(1), Nabarro LE(1), Anandan S(1), Veeraraghavan B(1).  Minocycline and Tigecycline: What Is Their Role in the Treatment ofCarbapenem-Resistant Gram-Negative Organisms?  Microb Drug Resist. 2016 Aug 26. [Epub ahead of print]  **Author information:**  (1)Department of Clinical Microbiology, Christian Medical College and Hospital , Vellore, South India .  Carbapenem-resistant organisms are increasingly common worldwide, particularly in India and are associated with high mortality rates especially in patients with severe infection such as bacteremia. Existing drugs such as carbapenems and polymyxins have a number of disadvantages, but remain the mainstay of treatment. The tetracycline class of antibiotics was first produced in the 1940s. Minocycline, tetracycline derivative, although licensed for treatment of wide range of infections, has not been considered for treatment of multidrug-resistant organisms until recently and needs further in vivo studies. Tigecycline, a derivative of minocycline, although with certain disadvantages, has been frequently used in the treatment of carbapenem-resistant organisms. In this articl e, we review the properties of minocycline and tigecycline, the common mechanisms of resistance, and assess their role in the management of carbapenem-resistant organisms.  DOI: 10.1089/mdr.2016.0043 | **INTL** | **JUL TO DEC** | **PMID:**27564414 |
|  | Shankar C(1), Santhanam S(2), Kumar M(2), Gupta V(2), Devanga Ragupathi NK(1),Veeraraghavan B(3).  Draft Genome Sequence of an Extended-Spectrum-β-Lactamase-Positive HypervirulentKlebsiella pneumoniae Strain with Novel Sequence Type 2318 Isolated from aNeonate.  Genome Announc. 2016 Nov 10;4(6). pii: e01273-16. doi: 10.1128/genomeA.01273-16.  **Author information:**  (1)Department of Clinical Microbiology, Christian Medical College, Vellore, Tamil Nadu, India. (2)Department of Neonatology, Christian Medical College, Vellore, Tamil Nadu, India. (3)Department of Clinical Microbiology, Christian Medical College, Vellore, Tamil Nadu, India vbalaji@cmcvellore.ac.in.  Antimicrobial resistance among hypervirulent Klebsiella pneumoniae is increasingly reported. Here, we report the draft genome sequence of a hypervirulent K. pneumoniae strain isolated from a neonate with sepsis belonging to novel sequence type 2318 (ST2318).  Copyright © 2016 Shankar et al.  DOI: 10.1128/genomeA.01273-16 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5105110  **PMID:**27834717 |
|  | Sharma P(1), Dahiya S(1), Balaji V(2), Kanga A(3), Panda P(4), Das R(5), DhanrajuA(6), Mendiratta DK(7), Sood S(1), Das BK(1), Kapil A(1).  Typhoidal Salmonellae: Use of Multi-Locus Sequence Typing to Determine PopulationStructure.  PLoS One. 2016 Sep 12;11(9):e0162530. doi: 10.1371/journal.pone.0162530.eCollection 2016.  **Author information:**  (1)All India Institute of Medical Sciences, New Delhi, India. (2)Christian Medical College, Vellore, India. (3)Indira Gandhi Medical College, Shimla, India. (4)Maharaja Krishna Chandra Gajapati Medical College, Orissa, India. (5)North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences, Shillong, India. (6)Sri Ramachandra Medical College and Research Institute, Chennai, India. (7)Mahatma Gandhi Institute of Medical Sciences, Wardha, India.  Enteric fever is an invasive infection predominantly caused by Salmonella enterica serovars Typhi and Paratyphi A. The pathogens have evolved from other nontyphoidal salmonellaeto become invasive and host restricted. Emergence of antimicrobial resistance in typhoidal salmonellae in some countries is a major therapeutic concern as the travelers returning from endemic countries carry resistant strains to non endemic areas. In order to understand the epidemiology and to design disease control strategies molecular typing of the pathogen is very important. We performed Multilocus Sequence Typing (MLST) of 251 S. Typhi and 18 S. Paratyphi strains isolated from enteric fever patients from seven centers across India during 2010-2013to determine the population structure and prevalence of MLST sequence types in India. MLST analysis revealed the presence of five sequence types (STs) of typhoidal salmonellae in India namely ST1, ST2 and ST3 for S. Typhi and ST85 and ST129 for S. Paratyphi A.S. Typhi strains showed monophyletic lineage and clustered in to 3 Sequence Types-ST1, ST2 and ST3 and S. Paratyphi A isolates segregated in two sequence types ST85 and ST129 respectively. No association was found between antimicrobial susceptibility and sequence types. This study found ST1 as the most prevalent sequence type of S. Typhi in India followed by ST2, which is in concordance with previous studies and MLST database. In addition a rare sequence type ST3 has been found which is reported for the first time from the Indian subcontinent. Amongst S. Paratyphi A, the most common sequence type is ST129 as also reported from other parts of world. This distribution and prevalence suggest the common spread of the sequence types across the globe and these findings can help in understanding the disease distribution.  DOI: 10.1371/journal.pone.0162530 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5019401  **PMID:**27618626 |
|  | Shekhar S(1), Gupta N(2), Kirubakaran R(3), Pareek P(4).  Oral nifedipine versus intravenous labetalol for severe hypertension duringpregnancy: a systematic review and meta-analysis.  BJOG. 2016 Jan;123(1):40-7. doi: 10.1111/1471-0528.13463. Epub 2015 Jun 26.  **Author information:**  (1)Department of Obstetrics & Gynecology, All India Institute of Medical Sciences, Jodhpur, India. (2)Department of Pediatrics, All India Institute of Medical Sciences, Jodhpur, India. (3)South Asian Cochrane Network, Christian Medical College Vellore, Vellore, India. (4)Department of Radiation Oncology, All India Institute of Medical Sciences, Jodhpur, India.  **Comment in**  BJOG. 2016 Jan;123(1):48.  BACKGROUND: Oral nifedipine is recommended along with labetalol and hydralazine for treatment of severe hypertension during pregnancy by most authorities. Although nifedipine is cheap and easily administered, the usage pattern among health care providers suggests a strong preference for labetalol despite lack of evidence for the same. OBJECTIVES: To determine the efficacy and safety of oral nifedipine for treatment of severe hypertension of pregnancy compared with intravenous labetalol. SEARCH STRATEGY: We systematically searched for articles comparing oral nifedipine with intravenous labetalol for the treatment of severe hypertension during pregnancy in any language, over Medline, Cochrane Central Register of Clinical Trials and Google Scholar from inception till February 2014. SELECTION CRITERIA: We included all RCTs that compared intravenous labetalol with oral nifedipine for treatment of severe hypertension during pregnancy, addressing relevant efficacy and safety outcomes. DATA COLLECTION AND ANALYSIS: Eligible studies were reviewed, and data were extracted onto a standard form. We used Cochrane review manager software for quantitative analysis. Data were analysed using a fixed effect model. MAIN RESULTS: The pooled analysis of seven trials (four from developing countries) consisting of 363 woman-infant pairs showed that oral nifedipine was associated with less risk of persistent hypertension (RR 0.42, 95% CI 0.18-0.96) and reported maternal side effects (RR 0.57, 95% CI 0.35-0.94). However, on sensitivity analysis the outcome 'persistent hypertension' was no longer significant. Other outcomes did not reach statistical significance. CONCLUSION: Oral nifedipine is as efficacious and safe as intravenous labetalol and may have an edge in low resource settings. TWEETABLE ABSTRACT: Although studies to date are few in number and small, nifedipine shows promise for severe hypertension in pregnancy. © 2015 Royal College of Obstetricians and Gynaecologists. DOI: 10.1111/1471-0528.13463 | **INTL** | **JAN TO JUN** | **PMID:**26113232 |
|  | Shetty S(1), Kapoor N(1), Dian Bondu J(2), Antonisamy B(3), Thomas N(1), PaulTV(4).  Bone turnover markers and bone mineral density in healthy mother-daughter pairsfrom South India.  Clin Endocrinol (Oxf). 2016 Nov;85(5):725-732. doi: 10.1111/cen.13173. Epub 2016Sep 5.  **Author information:**  (1)Department of Endocrinology, Diabetes & Metabolism, Christian Medical College, Vellore, India. (2)Department of Clinical Biochemistry, Christian Medical College, Vellore, India. (3)Department of Biostatistics, Christian Medical College, Vellore, India. (4)Department of Endocrinology, Diabetes & Metabolism, Christian Medical College, Vellore, India. thomasvpaul@yahoo.com.  Bone turnover markers (BTMs) provide important insights into the dynamics of bone remodelling and are subjected to preanalytical and ethnic variations in addition to influence of genetic and environmental factors.  AIM/OBJECTIVES: To derive ethnicity specific reference range for BTMs and to study their correlation with Bone Mineral Density (BMD) in a cohort of healthy postmenopausal women and their premenopausal daughters and to look at the impact of maternal bone mineral status on daughters bone health.  MATERIAL AND METHODS: This community based cross sectional study included 300 subjects (150 mother-daughter pairs). Demographic details were collected. Fasting blood and a second void morning urine samples were obtained for measurement of BTMs (sCTX, sPTNP1, sOC and urine DPD respectively) and bone mineral parameters. BMD was measured by DXA scan.  RESULTS: Osteoporosis was seen in 44·7% of the postmenopausal women. Ethnicity specific reference ranges of BTMs were derived for the study population. Significant inverse correlation was found between all BTMs (except urine DPD) and BMD(P < 0·05). Daughters of mothers with osteoporosis at spine and femoral neck had lower BMD, compared to daughters of mothers without osteoporosis(P = 0·03 & 0·05).  CONCLUSION: Apart from deriving the ethnicity specific reference range for BTMs and finding a significant inverse correlation between BTM and BMD, this study found significantly lower BMD in daughters of mothers with osteoporosis at spine and femoral neck implicating the probable interplay of genetic, epigenetic and similar environmental factors.  © 2016 John Wiley & Sons Ltd.  DOI: 10.1111/cen.13173 | **INTL** | **JUL TO DEC** | **PMID:**27497063 |
|  | Shetty S(1), Kapoor N(1), Mathai S(2), Paul TV(1).  Hyperphosphatemic tumoural calcinosis.  BMJ Case Rep. 2016 Jan 25;2016. pii: bcr2015213537. doi: 10.1136/bcr-2015-213537.  **Author information:**  (1)Department of Endocrinology, Christian Medical College (CMC), Vellore, Tamil Nadu, India. (2)Department of Child Health-1, Christian Medical College, Vellore, Tamil Nadu, India.  DOI: 10.1136/bcr-2015-213537 | **INTL** | **JAN TO JUN** | **PMID:**26811414 |
|  | Simon EG(1), Ghosh S(2), Iacucci M(2), Moran GW(3).  Ustekinumab for the treatment of Crohn's disease: can it find its niche?  Therap Adv Gastroenterol. 2016 Jan;9(1):26-36. doi: 10.1177/1756283X15618130.  **Author information:**  (1)Department of Gastroenterology, Christian Medical College, Vellore, India NIHR Biomedical Research Unit in Gastrointestinal and Liver Diseases, Nottingham University Hospitals NHS Trust and The University of Nottingham, Nottingham, UK. (2)Department of Medicine and IBD Clinic, University of Calgary, Calgary, Alberta, Canada. (3)NIHR Biomedical Research Unit in Gastrointestinal and Liver Diseases, Nottingham University Hospitals NHS Trust and The University of Nottingham, Nottingham, UK.  Crohn's disease is an immune-mediated disease that results in panenteric chronic inflammation in genetically predisposed individuals exposed to an appropriate environment. The past two decades have witnessed the emergence of an important class of drugs known as anti-tumour necrosis factor (TNF) agents in the treatment of Crohn's disease. Unfortunately, the utility of these agents have been hampered by primary and secondary nonresponse in a significant proportion of patients. Ustekinumab, a monoclonal antibody to the p40 subunit of interleukin (IL) 12 and 23, is a novel pharmacotherapy for this patient cohort that offers an out-of-class option. It is approved for use in psoriasis and psoriatic arthritis, and has now been evaluated in phase II trials for moderate-to-severe Crohn's disease. We here review the published literature and describe a potential clinical role for its use in this disease cohort. DOI: 10.1177/1756283X15618130 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4699281  **PMID:**26770265 |
|  | Simon EG(1,)(2), Samuel S(2), Ghosh S(3), Moran GW(2).  Ustekinumab: a novel therapeutic option in Crohn's disease.  Expert Opin Biol Ther. 2016 Aug;16(8):1065-74. doi:10.1080/14712598.2016.1205582.  **Author information:**  (1)a Department of Gastroenterology , Christian Medical College , Vellore , India. (2)b NIHR Nottingham Digestive Diseases Biomedical Research Unit , Nottingham University Hospitals NHS Trust and University of Nottingham , Nottingham , UK. (3)c Department of Medicine and IBD Clinic , University of Calgary , Calgary , Canada.  INTRODUCTION: Although anti-tumour necrosis factor (TNF) agents have caused a paradigm shift in the management of moderate-to-severe Crohn's, they are sometimes associated with diminished or absent response in a considerable proportion of patients. Hence agents targeting pathways other than TNF are needed. Ustekinumab is a monoclonal antibody directed against the p40 subunit of IL-12 and 23.  AREAS COVERED: This manuscript summarises the available evidence on the efficacy and safety of Ustekinumab in Crohn's disease through data available from randomised controlled trials and compassionate use programs across the world.  EXPERT OPINION: Current literature strongly supports the fact that ustekinumab is clinically efficacious and reasonably safe for induction and maintenance of remission in moderate-to-severe Crohn's disease.  DOI: 10.1080/14712598.2016.1205582 | **INTL** | **JUL TO DEC** | **PMID:**27341173 |
|  | Simon SS(1), Ramachandra SS(2), Abdullah DD(2), Islam MN(2), Kalyan CG(2).  Lessons learned from the disruption of dental training of Malaysian studentsstudying in Egypt during the Arab spring.  Educ Health (Abingdon). 2016 May-Aug;29(2):124-7. doi: 10.4103/1357-6283.188753.  **Author information:**  (1)Department of Dental Surgery, Christian Medical College and Hospital, Vellore, Tamil Nadu, India. (2)Faculty of Dentistry, SEGi University, Petaling Jaya, Selangor, Malaysia.  BACKGROUND: Political crisis and worsening security situation in Egypt in late 2013 resulted in Malaysian students who were pursuing their dental education in Egypt being recalled home to Malaysia. The Ministry of Higher Education in Malaysia took steps to integrate these students into public and private universities in Malaysia. METHODS: We used a questionnaire and informal interviews to learn from students returning from Egypt about their experiences transitioning from dental schools in Egypt to Malaysia. RESULTS: We discuss the challenges students faced with regards to credit transfer, pastoral care, the differences in the curriculum between the dental faculties of the two nations, and the financial implications of this disruption of their training. DISCUSSION: We live in a fragile world where similar political situations will surely arise again. The approaches used by the Malaysian government and the lessons learned from these students may help others. The perspectives of these students may help educators reintegrate expatriate students who are displaced by political instability back into the education system of their own countries. DOI: 10.4103/1357-6283.188753 | **INTL** | **JAN TO JUN** | **PMID:**27549650 |
|  | Singh G(1), Mariappan R, Gautham AK.  Buttressing the Pediatric Endotracheal Tube in Neonates: A Simple but UsefulTechnique.  J Neurosurg Anesthesiol. 2016 Nov 30. [Epub ahead of print]  **Author information:**  (1)Department of Anesthesia, Christian Medical College, Vellore, TN, India.  DOI: 10.1097/ANA.0000000000000396 | **INTL** | **JUL TO DEC** | **PMID:**27906764 |
|  | Singh O(1), Muthukrishna Pandian R(2), Sudhakar Kekre N(2).  Alkaptonuric Ochronosis.  Urology. 2016 Nov 2. pii: S0090-4295(16)30654-9. doi:10.1016/j.urology.2016.09.035. [Epub ahead of print]  **Author information:**  (1)Department of Urology, Christian Medical College and Hospital, Vellore, Tamilnadu 632004, India. Electronic address: dronkarsingh@gmail.com. (2)Department of Urology, Christian Medical College and Hospital, Vellore, Tamilnadu 632004, India.  Alkaptonuria is a rare autosomal recessive disorder of tyrosine metabolism. Deficiency of homogentisate 1,2 dioxygenase results in accumulation of oxidized homogentisic acid in the connective tissues of the skin, eyes and ears, musculoskeletal system, and cardiac valves, and in urolithiasis. Excretion of excessive homogentisic acid in urine causes dark-colored urine on exposure to air. We present a case of alkaptonuria with multiple system involvement, who presented with lower urinary tract symptoms secondary to vesical and prostatic calculi.  Copyright Â© 2016 Elsevier Inc. All rights reserved.  DOI: 10.1016/j.urology.2016.09.03 | **INTL** | **JUL TO DEC** | **PMID:**27816602 |
|  | Sivadasan A(1), Muthusamy K(1), Patil AK(1), Mathew V(1), Alexander M(2).  Pearls & Oy-sters: Mitochondrial neurogastrointestinal encephalomyopathy:Diagnosis and response to peritoneal dialysis.  Neurology. 2016 Apr 5;86(14):e147-50. doi: 10.1212/WNL.0000000000002536.  **Author information:**  (1)From the Department of Neurological Sciences, Christian Medical College, Vellore, India. (2)From the Department of Neurological Sciences, Christian Medical College, Vellore, India. [mathewalex@cmcvellore.ac.in](mailto:mathewalex@cmcvellore.ac.in).  DOI: 10.1212/WNL.0000000000002536 | **INTL** | **JAN TO JUN** | **PMID:**27044617 |
|  | Sivakumar R(1), Balakrishnan V(1), Gowri P(2), Visalakshi J(3).  Leptospiral Uveitis: Usefulness of Clinical Signs as Diagnostic Predictors.  Ocul Immunol Inflamm. 2016 Sep 6:1-8. [Epub ahead of print]  **Author information:**  (1)a Aravind Eye Hospital , Biostatistics , Madurai , India. (2)b Aravind Medical Research Foundation , Madurai , India. (3)c Christian Medical College and Hospital Vellore , Department of Biostatistics , Vellore , India.  PURPOSE: To analyze the diagnostic predictive ability of clinical variables.  METHODS: Demographic and clinical variables of 172 serologically proven leptospiral uveitis patients were compared with 200 controls of non-leptospiral uveitis. Multiple logistic regression analysis identified diagnostic predictors. A receiver operating characteristic curve tested the performance of the model.  RESULTS: Of all variables, male gender, farming as an occupation, and clinical features such as non-granulomatous panuveitis, hypopyon, and vitreous infiltration in the absence of retinochoroiditis constituted the predictive parameters, with the sensitivity and specificity of 86% and 90.7%, respectively.  CONCLUSIONS: Multiple logistic analysis detected clinically diagnostic predictors that can assist primary care ophthalmologists. Clinical diagnosis can further be confirmed by serology at tertiary care centers.  DOI: 10.1080/09273948.2016.1217341 | **INTL** | **JUL TO DEC** | **PMID:**27598430 |
|  | Sivaraju L(1), Mani S(2), Prabhu K(3), Daniel RT(3), Chacko AG(3).  Three-dimensional computed tomography angiographic study of the vertebral arteryin patients with congenital craniovertebral junction anomalies.  Eur Spine J. 2016 May 2. [Epub ahead of print]  **Author information:**  (1)Department of Neurological Sciences, Christian Medical College, Vellore, India. laxminadh.sivaraju@gmail.com. (2)Department of Radiodiagnosis, Christian Medical College, Vellore, India. (3)Department of Neurological Sciences, Christian Medical College, Vellore, India.  PURPOSE: To describe vertebral artery (VA) course at the C0-C1-C2 complex in patients with congenital bony craniovertebral junction (CVJ) anomalies. METHODS: We studied the course of 169 VAs in 86 patients with congenital bony CVJ anomalies [basilar invagination (42), os odontoideum (33), and irreducible atlantoaxial dislocation (11)]. Occipitalized atlas occurred in 41 patients (30 complete and 11 partial). Using axial, coronal and sagittal three-dimensional computed tomography (3D-CT) angiograms, we traced the VA bilaterally at the CVJ and correlated the course to the presence or absence of occipitalization of the atlas. RESULTS: Of the 73 arteries associated with occipitalization of atlas, all had an abnormal course-58 (78.4 %) coursed through a canal within the C0-C1 fused complex and 15 (20.3 %) coursed below the C1 posterior arch, and it was absent unilaterally in one patient. There were 96 arteries associated with a non-occipitalized atlas and only 15 (15.3 %) were abnormal-eight coursed below the C1 posterior arch, four coursed above the C1 arch in the absence of a C1 foramen transversarium, one passed through a canal in C0-C1 and two arteries were absent unilaterally. Sixty vertebral arteries (34 on the right and 26 on the left side) had a redundant loop situated at a distance of ≥5 mm from the C1 lateral mass in patients with os odontoideum and irreducible atlantoaxial dislocation. CONCLUSIONS: In occipitalization of the atlas, the VA course is usually abnormal-typically passing through a canal within the C0-C1 fused complex or below the C1 arch. A redundant VA loop is more likely to be seen in os odontoideum and irreducible atlantoaxial dislocation. Careful study of the vertebral artery course with 3D CT angiography is mandatory while contemplating CVJ realignment surgery in congenital anomalies of the CVJ. DOI: 10.1007/s00586-016-4580-7 | **INTL** | **JAN TO JUN** | **PMID:**27137997 |
|  | Sonambekar A(1), Gupta N(2), Swadi A(3), Tomar LR(4).  Carpal Tunnel Syndrome in Sarcoidosis: A Case Report of a Rare NeurologicManifestation.  Perm J. 2016 Fall;20(4). doi: 10.7812/TPP/15-168. Epub 2016 Sep 13.  **Author information:**  (1)Physician at the University College of Medical Sciences and at Guru Teg Bahadur Hospital in Dilshad Garden, Delhi, India. ajinkya.sonambekar@gmail.com. (2)Fellow in Clinical Immunology & Rheumatology at the Christian Medical College in Vellore, India. nik.gupta4u@gmail.com. (3)Radiologist at Byramjee Jeejeebhoy Government Medical College in Pune, India. akanksha.swadi@gmail.com. (4)Resident in the Neurology Department at the Govind Ballabh Pant Institute of Post Graduate Medical Education and Research in Delhi, India. drlaxmikantucms@yahoo.com.  INTRODUCTION: Sarcoidosis is a multisystemic inflammatory disease with myriad clinical manifestations. Neurologic involvement in sarcoidosis is uncommon. Peripheral neuropathic presentations include mononeuropathy, mononeuritis multiplex, and generalized sensory, motor, autonomic, and sensorimotor polyneuropathies.  CASE PRESENTATION: We report a case of carpal tunnel syndrome caused by sarcoidosis in a 30-year-old woman. Other causes of carpal tunnel syndrome were ruled out. The patient responded well to the standard line of corticosteroid treatment and wrist splinting.  DISCUSSION: Carpal tunnel syndrome caused by sarcoidosis is a rare presentation. The mechanism of neurologic involvement in sarcoidosis is not clear.  DOI: 10.7812/TPP/15-168 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5101080  **PMID:**27643973 |
|  | Srinivas MN(1), Amogh VN(2), Gautam MS(3), Prathyusha IS(4), Vikram NR(1), RetnamMK(1), Balakrishna BV(1), Kudva N(1).  A Prospective Study to Evaluate the Reliability of Thyroid Imaging Reporting andData System in Differentiation between Benign and Malignant Thyroid Lesions.  J Clin Imaging Sci. 2016 Feb 26;6:5. doi: 10.4103/2156-7514.177551. eCollection2016.  **Author information:**  (1)Department of Radiodiagnosis, MV Jayaram Medical College and Research Hospital, Hoskote, Bengaluru, Karnataka, India. (2)Department of Radiodiagnosis, Christian Medical College, Vellore, Tamil Nadu, India. (3)Department of Community Medicine, Bangalore Medical College, Bengaluru, Karnataka, India. (4)Department of Community Medicine, Rangaraya Medical College, Kakinada, Andhra Pradesh, India.  OBJECTIVES: To evaluate diagnostic reliability of the daily use of thyroid imaging reporting and data system (TIRADS) classification proposed by Kwak et al., in differentiating between a benign and a malignant thyroid lesion, to calculate inter-observer variability in the interpretation of each of the TIRADS ultrasound features and to evaluate role of TIRADS system in reducing unnecessary biopsies of benign lesions.  MATERIALS AND METHODS: Three hundred and sixty-five patients with clinically suspected thyroid lesions during the period from November 1, 2011, to August 31, 2015, were prospectively scanned on gray-scale and Doppler imaging by six radiologists separately. We used GE VOLUSON 730 PRO machine (GE healthcare, Milwaukee, USA) equipped with a 7.5-12 MHz high-frequency linear array transducer with color and power Doppler capability. We evaluated five sonological features: Internal composition, echogenicity, margins, presence and type of calcification, and shape of the lesion. Based on the TIRADS proposed by Kwak et al., we determined categories of the thyroid lesions. The diagnostic performance of TIRADS classification system was evaluated by comparison with the fine-needle aspiration cytology (FNAC) reports which were subsequently obtained after taking informed consent from the patients. All follicular neoplasms on FNAC were further followed up with excision biopsy and histology. The cytopathological report was used as the standard final diagnosis for comparison. The P value and odds ratio were determined to quantify how strongly the presence or absence of a particular ultrasound feature was associated with benignity or malignancy in the study population. The risk of malignancy was stratified for each TIRADS category-based on the total number of benign and malignant lesions in that category. Cervical lymph nodes were also evaluated for their size, loss of the central, echogenic hilum, presence of irregular and indistinct margin, microcalcification, and necrotic changes. Cohen's Kappa coefficient was determined separately for each of the five TIRADS malignant features to study the inter-observer agreement. Furthermore, the percentage of benign cases that were accurately determined by TIRADS which could have avoided unnecessary FNAC was determined.  RESULTS: The risk of malignancy in TIRADS categories 1 and 2 was found to be 0%, 0.64% in category 3, 4.76% in category 4A, 66.67% in category 4B, 83.33% in category 4C, and 100% in category 5. Out of the five suspicious sonological features, irregular margins showed the highest positive predictive value (95.45%) for malignancy followed by taller than wide shape (92.86%), microcalcifications (66.67%), marked hypoechogenicity (54.55%), and solid composition (48.15%). The specificity of three sonological features (completely cystic structure, hyperechogenicity, and macrocalcification) in classifying a nodule as benign was 100%. Loss of central echogenic hilum, presence of an irregular and indistinct margin, microcalcification and necrosis were found to have sensitivity of 100%, 63.63%, 27.27%, and 9.09%, respectively and specificity of 95.7%, 98.5%, 100%, and 100%, respectively for cervical lymph node to be malignant. The Kappa value for taller than wide shape, microcalcification, marked hypoechogenicity, solid composition, and irregular margins was 1.0 (95% confidence interval [CI]: 1-1), 1.0 (95% CI: 1-1), 0.90 (95% CI: 0.82-1), 0.88 (95% CI: 0.77-0.92), and 0.82 (95% CI: 0.64-1), respectively. The estimated decrease in unnecessary FNACs was found to be 43.83-86.30%.  CONCLUSIONS: TIRADS proposed by Kwak et al., combined with evaluation for sonological features of malignant lymph nodes is a valuable, safe, widely available, and easily reproducible imaging tool to stratify the risk of a thyroid lesion and helps in precluding unnecessary FNACs in a significant number of patients. TIRADS features convincingly show comparable results in the interpretation of TIRADS features more so, in the hands of radiologists experienced in thyroid imaging.  DOI: 10.4103/2156-7514.177551 | **INTL** | **JUL TO DEC** | **PMCID: PMC**4785791  **PMID:**27014501 |
|  | Srinivasan C(1), Kurian GP(1), Mariappan R(1).  A case of bronchiectasis needing lung isolation for cerebello pontine angle tumorexcision: Anesthetic challenges.  Saudi J Anaesth. 2016 Jul-Sep;10(3):359-61. doi: 10.4103/1658-354X.174923.  **Author information:**  (1)Department of Anesthesia, Christian Medical College, Vellore, Tamil Nadu, India.  The main goals of neuroanesthesia are the maintenance of adequate cerebral perfusion pressure, avoidance of hypercarbia, hypoxemia, and to provide better brain relaxation. Providing anesthesia for a patient with bronchiectasis needing lung isolation for craniotomy can be challenging. A 56-year-old male patient, case of right lung bronchiectasis with a right cerebello pontine angle tumor underwent excision in the left lateral position. Since he had severe bronchiectasis of the right lung, we had isolated the right lung using right-sided double lumen tube to avoid spillage. Intraoperative split lung test was performed to assess the right lung contribution on carbon dioxide (CO2) elimination and found that there was a significant contribution from the right lung. Hence, both lungs were ventilated to control CO2. The importance of lung isolation to prevent spillage and avoidance of one lung ventilation to control the arterial CO2 are highlighted in this case report. By providing a balanced anesthetic keeping both, the neurosurgical and thoracic concerns are important for better postoperative outcome.  DOI: 10.4103/1658-354X.174923 | **INTL** | **JUL TO DEC** | **PMCID: PMC**4916829  **PMID:**27375400 |
|  | Srivastava A(1), Mason C(2), Wagena E(3), Cuende N(4), Weiss DJ(5), HorwitzEM(6), Dominici M(7).  Part 1: Defining unproven cellular therapies.  Cytotherapy. 2016 Jan;18(1):117-9. doi: 10.1016/j.jcyt.2015.11.004.  **Author information:**  (1)Center for Stem Cell Research (a unit of inStem, Bengaluru), Department of Hematology, Christian Medical College, Vellore, India. Member at large of the ISCT Presidential Task Force on the Use of Unproven Cellular Therapies. Electronic address: aloks@cmcvellore.ac.in. (2)Advanced Centre for Biochemical Engineering, University College London, London, United Kingdom. Member at large of the ISCT Presidential Task Force on the Use of Unproven Cellular Therapies. (3)Voorburg, Netherlands. ISCT Europe, Regional Vice President 2014-2016. (4)Andalusian Initiative for Advanced Therapies, Junta de Andalucía, Sevilla, Spain. Chair, ISCT EU LRA Committee, 2014-2016. (5)Department of Medicine, University of Vermont, Burlington, Vermont, USA. ISCT Chief Scientific Officer 2014-2016. Chair, ISCT Pulmonary Committee 2013-2015. (6)Division of Hematology/Oncology/BMT, Nationwide Children's Hospital, Departments of Pediatrics and Medicine, The Ohio State University College of Medicine, Columbus, Ohio, USA. ISCT Past President 2010-2012. (7)Division of Oncology, Laboratory of Cellular Therapy, University of Modena & Reggio Emilia, Modena, Italy. ISCT President 2014-2016. Chair, ISCT Presidential Task Force on the Use of Unproven Cellular Therapies.  DOI: 10.1016/j.jcyt.2015.11.004 | **INTL** | **JAN TO JUN** | **PMID:**26719202 |
|  | Srivastava A(1), Shaji RV(2).  Cure for thalassemia major: from allogeneic hematopoietic stem cell transplantation to gene therapy.  Haematologica. 2016 Dec 1. pii: haematol.2015.141200. [Epub ahead of print]  **Author information:**  (1)Centre for Stem Cell Research and Department of Haematology, Christian Medical College, Vellore aloks@cmcvellore.ac.in. (2)Centre for Stem Cell Research and Department of Haematology, Christian Medical College, Vellore.  Allogeneic hematopoietic stem cell transplantation has been established for several decades as a gene replacement therapy for patients with thalassemia major and now offers very high rates of cure to those who are able to access thistherapy. Outcomes have improved tremendously over the last decade even in high-risk patients. The limited data available suggests that the long-term outcome is also excellent with >90% survival but for best results, hematopoietic stem cell transplantation should be offered early before any end organ damage occurs. However, access to this therapy is limited by lack of suitable donors in more than half the patients. Inadequate hematopoietic stem cell transplantation services and the cost of therapy are other reasons for the same, particularly in those parts of the world which have a high prevalence of this condition. As a result <10% of eligible patients are actuallyable to avail this therapy. Other options for curative therapies are therefore needed. Recently, gene correction in autologous hematopoietic stem cells has been successfully established using lentiviral vectors, and several clinical trials have been initiated. A gene editing approach to correct the β globin mutation or disrupt BCL11A to increase fetal hemoglobin production has also been reported and is expected to be introduced in clinical trials soon. Curative possibilities for the major hemoglobin disorders are expanding. Providing access to these therapies around the world would be the challenge. Copyright © 2016, Ferrata Storti Foundation. DOI: 10.3324/haematol.2015.141200 | **INT** | **JUL TO DEC** | **PMID:** 27909215 |
|  | Srivastava A(1), van den Berg HM(2).  Standardizing patient outcomes measurement to improve haemophilia care.  Haemophilia. 2016 Sep;22(5):651-3. doi: 10.1111/hae.13072. Epub 2016 Aug 26.  **Author information:**  (1)Department of Haematology, Christian Medical College, Vellore, India. aloks@cmcvellore.ac.in. (2)Julius Centre for Health Sciences and Primary Care, Utrecht, The Netherlands.  DOI: 10.1111/hae.13072 | **INTL** | **JUL TO DEC** | **PMID:**27562189 |
|  | Sukumaran D(1), Cherian AG(1), Das S(2), Winston A B(1), Kumar A(1), Shanthi FxM(1).  Drug Prescribing Pattern During Intranatal Period in a Secondary Care Hospital inSouth India: A Retrospective Study.  J Prim Care Community Health. 2016 Apr;7(2):113-7. doi: 10.1177/2150131915627768.Epub 2016 Jan 29.  **Author information:**  (1)Christian Medical College, Vellore, India. (2)Christian Medical College, Vellore, India saibaldas123@gmail.com.  BACKGROUND: During delivery, drugs being prescribed cause concerns due to their harmful effects on lactation as well as potential adverse reactions on the mother. This retrospective study was performed to evaluate the drug prescribing pattern during normal delivery in a secondary care hospital in India.  MATERIALS AND METHODS: This cross-sectional retrospective study included 3 months of patient's medical records.  RESULTS: A total of 2222 drugs, comprising 51 different types of drugs were prescribed to 313 mothers undergoing normal delivery. Most of these drugs are safe in lactation. Ten types of drugs would have been better avoided, but they possibly did not cause harm because of their limited short-term use only during the intranatal period.  CONCLUSION: This study reflects a good, safe, and rational medication practice during normal delivery for various common ailments in a secondary care hospital and can be cited as an example for similar settings.  © The Author(s) 2016.  DOI: 10.1177/2150131915627768 | **INTL** | **JUL TO DEC** | **PMID:**26825325 |
|  | Sundararaj MS(1), Singh G, Prabhu K.  Supplementary Motor Area (SMA) Syndrome: An Enigma to Anesthesiologists!  J Neurosurg Anesthesiol. 2016 Oct;28(4):438-9. doi: 10.1097/ANA.0000000000000243.  **Author information:**  (1)Department of Anaesthesiology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India.  DOI: 10.1097/ANA.0000000000000243 | **INTL** | **JUL TO DEC** | **PMID:**26524420 |
|  | Sunkara SK(1), Antonisamy B(2), Selliah HY(2), Kamath MS(2).  Pre-term birth and low birth weight following preimplantation genetic diagnosis:analysis of 88 010 singleton live births following PGD and IVF cycles.  Hum Reprod. 2016 Dec 15. [Epub ahead of print]  **Author information:**  (1)Queen's Hospital, Barking Havering Redbridge University Hospitals NHS Trust, Essex, UK sksunkara@hotmail.com Sesh.sunkara1@nhs.net. (2)Christian Medical College Hospital, Vellore, Tamil Nadu, India.  STUDY QUESTION: Is PGD associated with the risk of adverse perinatal outcomes such as pre-term birth (PTB) and low birth weight (LBW)? SUMMARY ANSWER: There was no increase in the risk of adverse perinatal outcomes of PTB, and LBW following PGD compared with autologous IVF.  WHAT IS KNOWN ALREADY: Pregnancies resulting from ART are associated with a higher risk of pregnancy complications compared with spontaneously conceived pregnancies. The possible reason of adverse obstetric outcomes following ART has been attributed to the underlying infertility itself and embryo specific epigenetic modifications due to the IVF techniques. It is of interest whether interventions such as embryo biopsy as performed in PGD affect perinatal outcomes.  STUDY DESIGN, SIZE, DURATION: Anonymous data were obtained from the Human Fertilization and Embryology Authority (HFEA), the statutory regulator of ART in the UK. The HFEA has collected data prospectively on all ART performed in the UK since 1991. Data from 1996 to 2011 involving a total of 88 010 singleton live births were analysed including 87 571 following autologous stimulated IVF ± ICSI and 439 following PGD cycles.  PARTICIPANTS/MATERIALS, SETTING, METHODS: Data on all women undergoing either a stimulated fresh IVF ± ICSI treatment cycle or a PGD cycle during the period from 1996 to 2011 were analysed to compare perinatal outcomes of PTB and LBW among singleton live births. Logistic regression analysis was performed adjusting for female age category, year of treatment, previous IVF cycles, infertility diagnosis, number of oocytes retrieved, whether IVF or ICSI was used and day of embryo transfer.  MAIN RESULTS AND THE ROLE OF CHANCE: There was no increase in the risk of PTB and LBW following PGD versus autologous stimulated IVF ± ICSI treatment, unadjusted odds of PTB (odds ratio (OR) 0.68, 95% CI: 0.46-0.99) and LBW (OR 0.56, 95% CI: 0.37-0.85). After adjusting for the potential confounders, there was again no increase in the risk of the adverse perinatal outcomes following PGD: PTB (adjusted odds ratio (aOR) 0.66, 95% CI: 0.45-0.98) and LBW (aOR 0.58, 95% CI: 0.38-0.88).  LIMITATIONS, REASONS FOR CAUTION: Although the analysis was adjusted for a number of important confounders, the data set had no information on confounders such as smoking, body mass index and the medical history of women during pregnancy to allow adjustment. There was no information on the stage of embryo at biopsy, whether blastomere or trophectoderm biopsy. WIDER IMPLICATIONS FOR THE FINDINGS: The demonstration that PGD is not associated with higher risk of PTB and LBW provides reassurance towards its current expanding application.  STUDY FUNDING/COMPETING INTERESTS: No funding was obtained. There are no competing interests to declare.  © The Author 2016. Published by Oxford University Press on behalf of the European Society of Human Reproduction and Embryology. All rights reserved. For Permissions, please email: journals.permissions@oup.com.  DOI: 10.1093/humrep/dew317 | **INTL** | **JUL TO DEC** | **PMID:**27979918 |
|  | Suzana S(1), Ninan MM(1), Gowri M(2), Venkatesh K(3), Rupali P(4), Michael JS(1).  Xpert MTB/Rif for the diagnosis of extrapulmonary tuberculosis--an experiencefrom a tertiary care centre in South India.  Trop Med Int Health. 2016 Mar;21(3):385-92. doi: 10.1111/tmi.12655. Epub 2016 Jan19.  **Author information:**  (1)Department of Microbiology, Christian Medical College, Vellore, India. (2)Department of Biostatistics, Christian Medical College, Vellore, India. (3)Department of Spinal Disorders, Christian Medical College, Vellore, India. (4)Department of Infectious Diseases, Christian Medical College, Vellore, India.  OBJECTIVE: The Xpert MTB/Rif, with a detection limit of 131 CFU/ml, plays a valuable role in the diagnosis of extrapulmonary tuberculosis, both susceptible and resistant. This study aims at evaluating the Xpert MTB/Rif for the same, at a tertiary care centre in south India, assessing it against both culture and a composite gold standard (CGS). METHODS: We tested consecutive samples from patients suspected of extrapulmonary tuberculosis with Xpert MTB/Rif, evaluated its sensitivity and specificity against solid and/or liquid culture and CGS. An individual analysis of different sample types (tissue biopsies, fluids, pus, lymph node biopsies and CSF) given an adequate sample size, against both culture and CGS, was also performed. RESULTS: In total, 494 samples were analysed against culture. Compared to culture, the sensitivity of Xpert MTB/Rif was 89% (95% CI 0.81-0.94) and its specificity was 74% (95% CI 0.70-0.78). When Xpert MTB/Rif was compared to the CGS, pooled sensitivity was 62% (95% CI 0.56-0.67) and specificity was 100% (95% CI 0.91-1.00). CONCLUSION: This assay performs better than the currently available conventional laboratory methods. The rapidity with which results are obtained is an added advantage, and its integration into a routine diagnostic protocol must be considered. © 2015 John Wiley & Sons Ltd. DOI: 10.1111/tmi.12655 | **INTL** | **JAN TO JUN** | **PMID:**26671654 |
|  | Syed KA(1), Raja K(2), Kolethekkat AA(3), Varghese AM(2), Al Abri R(3), KurienM(2).  Congenital midnasal stenosis - A novel technique for management.  Int J Pediatr Otorhinolaryngol. 2016 Aug;87:117-20. doi:10.1016/j.ijporl.2016.06.014. Epub 2016 Jun 7.  **Author information:**  (1)Christian Medical College, Vellore, India. Electronic address: skamrann@gmail.com. (2)Christian Medical College, Vellore, India. (3)Sultan Qaboos University Hospital, Muscat, Oman.  Neonates are obligate nasal breathers and nasal obstruction in a neonate is an emergency. Here we report two cases of congenital mid-nasal stenosis, discuss its presentation and diagnosis with description of a novel method of management.  Copyright © 2016 Elsevier Ireland Ltd. All rights reserved.  DOI: 10.1016/j.ijporl.2016.06.014 | **INTL** | **JUL TO DEC** | **PMID:**27368456 |
|  | Takeuchi M(1), Dahabreh IJ(2), Nihashi T(3), Iwata M(4), Varghese GM(5), TerasawaT(1).  Nuclear Imaging for Classic Fever of Unknown Origin: Meta-Analysis.  J Nucl Med. 2016 Dec;57(12):1913-1919. Epub 2016 Jun 23.  **Author information:**  (1)Department of Emergency and General Internal Medicine, Fujita Health University School of Medicine, Toyoake, Japan terasawa@fujita-hu.ac.jp motoki-t@fujita-hu.ac.jp. (2)Center for Evidence-based Medicine, Brown University, Providence, Rhode Island. (3)Department of Radiology, Nagoya University Graduate School of Medicine, Nagoya, Japan; and. (4)Department of Emergency and General Internal Medicine, Fujita Health University School of Medicine, Toyoake, Japan. (5)Department of Infectious Diseases, Christian Medical College, Vellore, India.  Several studies have assessed nuclear imaging tests for localizing the source of fever in patients with classic fever of unknown origin (FUO); however, the role of these tests in clinical practice remains unclear. We systematically reviewed the test performance, diagnostic yield, and management decision impact of nuclear imaging tests in patients with classic FUO.METHODS: We searched PubMed, Scopus, and other databases through October 31, 2015, to identify studies reporting on the diagnostic accuracy or impact on diagnosis and management decisions of (18)F-FDG PET alone or integrated with CT ((18)F-FDG PET/CT), gallium scintigraphy, or leukocyte scintigraphy. Two reviewers extracted data. We quantitatively synthesized test performance and diagnostic yield and descriptively analyzed evidence about the impact on management decisions.  RESULTS: We included 42 studies with 2,058 patients. Studies were heterogeneous and had methodologic limitations. Diagnostic yield was higher in studies with higher prevalence of neoplasms and infections. Nonneoplastic causes, such as adult-onset Still's disease and polymyalgia rheumatica, were less successfully localized. Indirect evidence suggested that (18)F-FDG PET/CT had the best test performance and diagnostic yield among the 4 imaging tests; summary sensitivity was 0.86 (95% confidence interval [CI], 0.81-0.90), specificity 0.52 (95% CI, 0.36-0.67), and diagnostic yield 0.58 (95% CI, 0.51-0.64). Evidence on direct comparisons of alternative imaging modalities or on the impact of tests on management decisions was limited.  CONCLUSION: Nuclear imaging tests, particularly (18)F-FDG PET/CT, can be useful in identifying the source of fever in patients with classic FUO. The contribution of nuclear imaging may be limited in clinical settings in which infective and neoplastic causes are less common. Studies using standardized diagnostic algorithms are needed to determine the optimal timing for testing and to assess the impact of tests on management decisions and patient-relevant outcomes.  © 2016 by the Society of Nuclear Medicine and Molecular Imaging, Inc.  DOI: 10.2967/jnumed.116.174391 | **INTL** | **JUL TO DEC** | **PMID:**27339873 |
|  | Tanmoy AM(1), Ahmed AN(1,)(2), Arumugam R(3), Hossain B(1), Marzan M(1), SahaS(1), Arifeen SE(1,)(4), Baqui AH(1,)(5), Black RE(5), Kang G(3), Saha SK(1,)(6).  Rotavirus Surveillance at a WHO-Coordinated Invasive Bacterial DiseaseSurveillance Site in Bangladesh: A Feasibility Study to Integrate TwoSurveillance Systems.  PLoS One. 2016 Apr 20;11(4):e0153582.  doi: 10.1371/journal.pone.0153582.eCollection 2016.  **Author information:**  (1)Child Health Research Foundation, Department of Microbiology, Dhaka Shishu Hospital, Dhaka, Bangladesh. (2)Department of Pediatrics, Dhaka Shishu Hospital, Bangladesh Institute of Child Health, Dhaka, Bangladesh. (3)Department of Gastrointestinal Sciences, Christian Medical College, Vellore, India. (4)Department of Child and Adolescent Health, International Centre for Diarrhoeal Disease Research, Mohakhali, Dhaka, Bangladesh. (5)Department of International Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States of America. (6)Department of Microbiology, Dhaka Shishu Hospital, Bangladesh Institute of Child Health, Dhaka, Bangladesh.  The World Health Organization (WHO) currently coordinates rotavirus diarrhea and invasive bacterial disease (IBD) surveillance at 178 sentinel sites in 60 countries. However, only 78 sites participate in both surveillance systems using a common sentinel site. Here, we explored the feasibility of extending a WHO-IBD surveillance platform to generate data on the burden of rotaviral diarrhea and its epidemiological characteristics to prepare the countries to measure the impact of rotaviral vaccine. A six-month (July to December, 2012) surveillance, managed by IBD team, collected stool samples and clinical data from under-five children with acute watery diarrhea at an IBD sentinel site. Samples were tested for rotavirus antigen by ELISA and genotyped by PCR at the regional reference laboratory (RRL). Specimens were collected from 79% (n=297) of eligible cases (n=375); 100% of which were tested for rotavirus by ELISA and 54% (159/297) of them were positive. At RRL, all the cases were confirmed by PCR and genotyped (99%; 158/159). The typing results revealed the predominance of G12 (40%; 64/159) genotype, followed by G1 (31%; 50/159) and G9 (19%; 31/159). All in all, this exploratory surveillance collected the desired demographic and epidemiological data and achieved almost all the benchmark indicators of WHO, starting from enrollment number to quality assurance through a number of case detection, collection, and testing of specimens and genotyping of strains at RRL. The success of this WHO-IBD site in achieving these benchmark indicators of WHO can be used by WHO as a proof-of-concept for considering integration of rotavirus surveillance with WHO-IBD platforms, specifically in countries with well performing IBD site and no ongoing rotavirus surveillance.  DOI: 10.1371/journal.pone.0153582 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4838211  **PMID:**27096958 |
|  | Tergestina M(1), Rebekah G(2), Job V(3), Simon A(4), Thomas N(1).  A randomized double-blind controlled trial comparing two regimens of vitamin Dsupplementation in preterm neonates.  J Perinatol. 2016 Sep;36(9):763-7. doi: 10.1038/jp.2016.70. Epub 2016 May 5.  **Author information:**  (1)Department of Neonatology, Christian Medical College, Vellore, India. (2)Department of Biostatistics, Christian Medical College, Vellore, India. (3)Department of Biochemistry, Christian Medical College, Vellore, India. (4)Department of Child Health, Christian Medical College, Vellore, India.  OBJECTIVE: To compare the efficacy of 400 vs 1000 IU oral vitamin D supplementation in preterm neonates of 27 to 34 weeks gestation.  METHODS: This double-blind randomized controlled trial allocated preterm babies to receive either 400 or 1000 IU of vitamin D3 (n=60 in each group). Primary outcome was prevalence of vitamin D insufficiency (serum vitamin D levels<20 ng ml(-1)) at 40 weeks of corrected gestational age (CGA).  RESULTS: At term CGA vitamin D insufficiency was significantly lower in the 1000 IU group than in the 400 IU group (2% vs 64.6%, P⩽0.001). Although elevated vitamin D levels were seen in 9.8% of babies on 1000 IU per day, this was not associated with clinical or biochemical evidence of toxicity.  CONCLUSION: Supplementing preterm babies with 1000 IU of vitamin D3 daily decreases the prevalence of vitamin D insufficiency at term CGA. Excess levels of vitamin D may occur at this dose in some babies.  DOI: 10.1038/jp.2016.70 | **INTL** | **JUL TO DEC** | **PMID:**27149055 |
|  | Thangakunam B(1), Isaac BT(1), Christopher DJ(1), Burad D(2).  Idiopathic pleuroparenchymal fibroelastosis - A rare idiopathic interstitialpneumonia.  Respir Med Case Rep. 2015 Nov 22;17:8-11. doi: 10.1016/j.rmcr.2015.11.004.eCollection 2016.  **Author information:**  (1)Department of Pulmonary Medicine, Christian Medical College, Vellore, India. (2)Department of General Pathology, Christian Medical College, Vellore, India.  Idiopathic pleuroparenchymal fibroelastosis is a rare idiopathic interstitial pneumonia. It was first described in 2004 and subsequently included in the ATS/ERS classification of idiopathic interstitial pneumonia in 2013. There have been few cases reported so far. The diagnostic criteria is still emerging and its etiology is being questioned. We report a case of pleuroparenchymal fibroelastosis probably idiopathic, the first of its kind to be reported from India, and a brief review of the literature.  DOI: 10.1016/j.rmcr.2015.11.004 | **INTL** | **JUL TO DEC** | **PMCID: PMC**4821335  **PMID:**27141432 |
|  | Thangaraj KR(1), Priyadarshini SJ, Qureshi IN, Joseph AJ, Balasubramanian KA,Ramachandran A.  Plasma Citrulline, Glycans, and Hydrogen Sulfide in Patients With AcutePancreatitis: Possible Markers of Intestinal Damage.  Pancreas. 2016 Jul;45(6):e27-9. doi: 10.1097/MPA.0000000000000593.  **Author information:**  (1)Division of Gastrointestinal Sciences The Wellcome Trust Research Laboratory Christian Medical College Vellore, India Division of Gastrointestinal Sciences Department of Gastroenterology Christian Medical College Vellore, India Division of Gastrointestinal Sciences The Wellcome Trust Research Laboratory Christian Medical College Vellore, India anup@cmcvellore.ac.in wellcome@cmcvellore.ac.in.  DOI: 10.1097/MPA.0000000000000593 | **INTL** | **JUL TO DEC** | **PMID:**27295536 |
|  | Tharmalingam J(1), Prabhakar AT(2), Gangadaran P(2), Dorny P(3,)(4), VercruysseJ(3), Geldhof P(3), Rajshekhar V(2), Alexander M(2), Oommen A(2).  Host Th1/Th2 immune response to Taenia solium cyst antigens in relation to cystburden of neurocysticercosis.  Parasite Immunol. 2016 Oct;38(10):628-34. doi: 10.1111/pim.12351.  **Author information:**  (1)Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, India. jayaraman.ntr@gmail.com, jayaraman.ntr@rs.tus.ac.jp. (2)Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, India. (3)Laboratory of Parasitology, Faculty of Veterinary Medicine, Ghent University, Ghent, Belgium. (4)Department of Biomedical Sciences, Institute of Tropical Medicine, Antwerp, Belgium.  Neurocysticercosis (NCC), Taenia solium larval infection of the brain, is an important cause of acquired seizures in endemic countries, which relate to number, location and degenerating cysts in the brain. Multicyst infections are common in endemic countries although single-cyst infection prevails in India. Single-cyst infections in an endemic country suggest a role for host immunity limiting the infection. This study examined ex vivo CD4(+) T cells and in vitro Th1 and Th2 cytokine responses to T. solium cyst antigens of peripheral blood mononuclear cells of healthy subjects from endemic and nonendemic regions and of single- and multicyst-infected patients for association with cyst burden of NCC. T. solium cyst antigens elicited a Th1 cytokine response in healthy subjects of T. solium-endemic and T. solium-non-endemic regions and those with single-cyst infections and a Th2 cytokine response from subjects with multicyst neurocysticercosis. Multicyst neurocysticercosis subjects also exhibited low levels of effector memory CD4(+) T cells. Th1 cytokine response of T. solium exposure and low infectious loads may aid in limiting cyst number. Th2 cytokines and low effector T cells may enable multiple-cyst infections to establish and persist.  © 2016 John Wiley & Sons Ltd.  DOI: 10.1111/pim.12351 | **INTL** | **JUL TO DEC** | **PMID:**27493081 |
|  | Thomas R(1), Chacko AG(2).  Principles in Skull Base Reconstruction following Expanded Endoscopic Approaches.  J Neurol Surg B Skull Base. 2016 Aug;77(4):358-63. doi: 10.1055/s-0036-1579543.Epub 2016 Feb 26.  **Author information:**  (1)Department of ENT, Christian Medical College, Vellore, India. (2)Department of Neurosurgery, Christian Medical College, Vellore, India.  OBJECTIVES: This study aims to describe the types of anterior skull base defects following expanded endoscopic approaches (EEA) and to outline the techniques involved in the repair of these defects.  DESIGN: We retrospectively analyzed 63 cases of endoscopic skull base reconstruction (ESBR) following tumor excision, done from September 2011 to January 2015. These tumors consisted of 14 pituitary adenomas, 20 craniopharyngiomas, and 29 other miscellaneous tumors. The classification of skull base defects by Tabaee et al and the classification of cerebrospinal fluid (CSF) leaks by Esposito et al were considered during the ESBR. Recurrence of CSF leak was considered as failure of reconstruction.  RESULTS: The 63 skull base defects included in this study occurred following EEA for tumor excision. Failure of reconstruction occurred in 6 six patients. All were successfully repaired, however, three patients in this series died due to tumor-related complications.  CONCLUSION: The adherence to the general principles of reconstruction, appreciating the subtle differences in the nature of the various defects and the ability to adopt different strategies are the prerequisites for the successful closure of skull base defects.  DOI: 10.1055/s-0036-1579543 | **INTL** | **JUL TO DEC** | **PMCID: PMC**4949070  **PMID:**27441162 |
|  | Thomas R(1), Girishan S(2), Chacko AG(2).  Endoscopic Transmaxillary Transposition of Temporalis Flap for RecurrentCerebrospinal Fluid Leak Closure.  J Neurol Surg B Skull Base. 2016 Dec;77(6):445-448. Epub 2016 Mar 31.  **Author information:**  (1)Department of Otorhinolaryngology, Christian Medical College, Vellore, Tamil Nadu, India. (2)Department of Neurosurgery, Christian Medical College, Vellore, Tamil Nadu, India.  To describe the technique of endoscopic transmaxillary temporalis Objective muscle flap transposition for the repair of a persistent postoperative sphenoidal The repair of a recurrent cerebrospinal fluid cerebrospinal fluid leak. Design leak for a patient who had undergone endoscopic transsphenoidal excision of an invasive silent corticotroph Hardy C and Knosp Grade IV pituitary adenoma was undertaken. The patient had completed postoperative radiotherapy for the residual tumor and presented with cerebrospinal fluid leak, 1 year later. The initial two attempts to repair the cerebrospinal fluid leak with free grafts failed. Therefore, an endoscopic transmaxillary transposition of the temporalis muscle The endoscopic flap was attempted to stop the cerebrospinal fluid leak. Results transmaxillary transposition of the vascularized temporalis muscle flap onto the cerebrospinal fluid leak repair site resulted in successful closure of the Endoscopic transmaxillary transposition of cerebrospinal fluid leak. Conclusion the temporalis flap resulted in closure of recurrent cerebrospinal fluid leak in a patient with recurrent pituitary adenoma, who had undergone previous surgery and radiotherapy. This technique has advantages over the endoscopic transpterygoid transposition of the same flap and could be used as a complementary technique in selected patients. | **INTL** | **JUL TO DEC** | **PMCID: PMC**5112164  **PMID:**27857869 |
|  | Tilak M(1), Isaac SA(1), Fletcher J(1), Vasanthan LT(1), Subbaiah RS(1), BabuA(1), Bhide R(1), Tharion G(1).  Mirror Therapy and Transcutaneous Electrical Nerve Stimulation for Management ofPhantom Limb Pain in Amputees - A Single Blinded Randomized Controlled Trial.  Physiother Res Int. 2016 Jun;21(2):109-15. doi: 10.1002/pri.1626. Epub 2015 Apr1.  **Author information:**  (1)Christian Medical College, Vellore, 632002, India.  BACKGROUND AND PURPOSE: Phantom limb pain (PLP) can be disabling for nearly two thirds of amputees. Hence, there is a need to find an effective and inexpensive trea tment that can be self administered. Among the non-pharmacological treatment for PLP, transcutaneous electrical nerve stimulation (TENS) applied to the contralateral extremity and mirror therapy are two promising options. However, there are no studies to compare the two treatments. The purpose of this study is to evaluate and compare mirror therapy and TENS in the management of PLP in subjects with amputation.  METHODS: The study was an assessor blinded randomized controlled trial conducted at Physiotherapy Gymnasium of Physical Medicine and Rehabilitation Department, Christian Medical College, Vellore. Twenty-six subjects with PLP consented to participate. An initial assessment of pain using visual analogue scale (VAS) and universal pain score (UPS) was performed by a therapist blinded to the treatment given. Random allocation into Group I-mirror therapy and Group II-TENS was carried out. After 4 days of treatment, pain was re-assessed by the same therapist. The mean difference in Pre and Post values were compared among the groups. The change in pre-post score was analyzed using the paired t test.  RESULTS: Participants of Group I had significant decrease in pain [VAS ( p = 0.003) and UPS ( p = 0.001)]. Group II also showed a significant reduction in pain [VAS ( p = 0.003) and UPS ( p = 0.002)]. However, no difference was observed between the two groups [VAS ( p = 0.223 and UPS ( p = 0.956)].  DISCUSSION: Both Mirror Therapy and TENS were found to be effective in pain reduction on a short-term basis. However, no difference between the two groups was found. Substantiation with long-term follow-up is essential to find its long-term effectiveness. Copyright © 2015 John Wiley & Sons, Ltd.  Copyright © 2015 John Wiley & Sons, Ltd.  DOI: 10.1002/pri.1626 | **INTL** | **JAN TO JUN** | **PMID:**25832306 |
|  | Tomar LR(1), Gupta N(2), Malik S(3), Garg P(4), Chhabra P(5).  Image Diagnosis: Immune Thrombocytopenia Secondary to Abdominal Koch Disease.  Perm J. 2016 Winter;20(1):e103-4. doi: 10.7812/TPP/15-032.  **Author information:**  (1)Resident in the Neurology Department at the Govind Ballabh Pant Institute of Post Graduate Medical Education and Research in Delhi, India. drlaxmikantucms@yahoo.com. (2)Fellow in Clinical Immunology & Rheumatology at the Christian Medical College in Vellore, India. nik.gupta4u@gmail.com. (3)Senior Resident in the Department of Medicine at the University College of Medical Sciences and Guru Teg Bahadur Hospital, University of Delhi, Dilshad Garden, Delhi, India. sarthakmalik87@gmail.com. (4)Fellow in the Department of Pathology at the University College of Medical Sciences and Guru Teg Bahadur Hospital, University of Delhi, Dilshad Garden, Delhi, India. drparitoshgarg@gmail.com. (5)Fellow in the Department of Gastroenterology at the Post Graduate Institute of Medical Education and Research in Chandigarh, India. puneet.pgi@gmail.com.  DOI: 10.7812/TPP/15-032 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4732805  **PMID:**26824970 |
|  | Torumkuney D(1), Chaiwarith R(2), Reechaipichitkul W(3), Malatham K(4),Chareonphaibul V(5), Rodrigues C(6), Chitins DS(7), Dias M(8), Anandan S(9),Kanakapura S(10), Park YJ(11), Lee K(12), Lee H(13), Kim JY(13), Lee Y(14), LeeHK(15), Kim JH(16), Tan TY(17), Heng YX(17), Mukherjee P(18), Morrissey I(19).  Results from the Survey of Antibiotic Resistance (SOAR) 2012-14 in Thailand,India, South Korea and Singapore.  J Antimicrob Chemother. 2016 May;71 Suppl 1:i3-19. doi: 10.1093/jac/dkw073.  **Author information:**  (1)GlaxoSmithKline, 980 Great West Road, Brentford, Middlesex TW8 9GS, UK didem.x.torumkuney@gsk.com. (2)Faculty of Medicine, Chiang Mai University, Maharaj Nakorn Chiang Mai Hospital, 110 Intavaroros Road, Tambon Sribhoom, Muang, Chiang Mai 50200, Thailand. (3)Khon Kaen University Faculty of Medicine, Srinagarind Hospital, 123 Mittraphap Highway, Tambol Naimuang, Muang District, Khon Kaen 40002, Thailand. (4)Mahidol University Faculty of Medicine Ramathibodi Hospital, 270 Rama VI. Road, oong Phayathai, Ratchathewi, Bangkok 10400, Thailand. (5)GlaxoSmithKline Thailand, 12th Floor, Wave Place, 55 Wireless Road, Lumpini, Patumwan, Bangkok 10330, Thailand. (6)Hinduja Hospital and Medical Research Centre, Department of Microbiology, Veer Savarkar Marg, Mahim, Mumbai 400 016, India. (7)Choithram Hospital and Research Centre, Department of Microbiology, Manik Bagh Road, Indore 452 014 (M/P), India. (8)St John's Medical College Hospital, Department of Microbiology, Sarjapur Road, Bangalore 560 034, India. (9)Christian Medical College, Department of Microbiology, Vellore 632 004, India. (10)GlaxoSmithKline India, No. 5 Embassy Links, Cunningham (SRT) Road, Bangalore 560 052, India. (11)The Catholic University of Korea, Seoul St Mary's Hospital, 222 Banpo-daero, Seocho-Gu, Seoul, South Korea. (12)Yonsei University College of Medicine, Severance Hospital, 50-1, Yonsei-ro, Seodaemun-gu, Seoul, South Korea. (13)Yonsei University College of Medicine, Gangnam Severance Hospital, 211 Eonju-ro, Gangnam-gu, Seoul, South Korea. (14)Hanyang University Medical Center, 222-1, Wangsimni-ro, Seongdong-gu, Seoul, South Korea. (15)The Catholic University of Korea, Uijongbu St Mary's Hospital, 271, Cheonbo-ro, Ukjeongbu-si, Gyeonggi-do, Korea. (16)GlaxoSmithKline Korea, LS Yongsan Tower, 9th Floor, Hangang 191, Yongsan-gu, Seoul, South Korea. (17)Changi General Hospital Pte Ltd (Reg. No. 198904226R), 2 Simei Street 3, Singapore 529889. (18)GlaxoSmithKline Singapore, (Reg. No. 198102938K), 150 Beach Road, No. 22-00 Gateway West, Singapore 189720. (19)IHMA Europe Sàrl, 9A Route de la Corniche, Epalinges 1066, Switzerland.  Erratum in  J Antimicrob Chemother. 2016 Dec;71(12 ):3628.  OBJECTIVES: To provide susceptibility data for community-acquired respiratory tract isolates of Streptococcus pneumoniae, Streptococcus pyogenes, Haemophilus influenzae and Moraxella catarrhalis collected in 2012-14 from four Asian countries.  METHODS: MICs were determined using Etest(®) for all antibiotics except erythromycin, which was evaluated by disc diffusion. Susceptibility was assessed using CLSI, EUCAST and pharmacokinetic/pharmacodynamic (PK/PD) breakpoints. For macrolide/clindamycin interpretation, breakpoints were adjusted for incubation in CO2 where available.  RESULTS: Susceptibility of S. pneumoniae was generally lower in South Korea than in other countries. Penicillin susceptibility assessed using CLSI oral or EUCAST breakpoints ranged from 21.2% in South Korea to 63.8% in Singapore. In contrast, susceptibility using CLSI intravenous breakpoints was much higher, at 79% in South Korea and ∼95% or higher elsewhere. Macrolide susceptibility was ∼20% in South Korea and ∼50%-60% elsewhere. Among S. pyogenes isolates (India only), erythromycin susceptibility (∼20%) was lowest of the antibiotics tested. In H. influenzae antibiotic susceptibility was high except for ampicillin, where susceptibility ranged from 16.7% in South Korea to 91.1% in India. South Korea also had a high percentage (18.1%) of β-lactamase-negative ampicillin-resistant isolates. Amoxicillin/clavulanic acid susceptibility for each pathogen (PK/PD high dose) was between 93% and 100% in all countries except for H. influenzae in South Korea (62.5%).  CONCLUSIONS: Use of EUCAST versus CLSI breakpoints had profound differences for cefaclor, cefuroxime and ofloxacin, with EUCAST showing lower susceptibility. There was considerable variability in susceptibility among countries in the same region. Thus, continued surveillance is necessary to track future changes in antibiotic resistance.  © The Author 2016. Published by Oxford University Press on behalf of the British Society for Antimicrobial Chemotherapy. All rights reserved. For Permissions, please e-mail: journals.permissions@oup.com.  DOI: 10.1093/jac/dkw073 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4890353  **PMID:**27048580 |
|  | Turel MK(1), Rajshekhar V(1).  Letter to editor: Wrong level surgery for intradural thoracic spinal tumour.  Br J Neurosurg. 2016 Aug;30(4):468-9. doi: 10.1080/02688697.2016.1199791. Epub2016 Jun 22.  **Author information:**  (1)a Department of Neurological Sciences , Christian Medical College , Vellore , Tamil Nadu , India.  DOI: 10.1080/02688697.2016.1199791 | **INTL** | **JUL TO DEC** | **PMID:**27331423 |
|  | Tuschl K(1,)(2), Meyer E(3), Valdivia LE(2), Zhao N(4), Dadswell C(5), Abdul-SadaA(5), Hung CY(6), Simpson MA(7), Chong WK(8), Jacques TS(9), Woltjer RL(10),Eaton S(11), Gregory A(12), Sanford L(12), Kara E(13,)(14), Houlden H(13), CunoSM(15,)(16), Prokisch H(15,)(16), Valletta L(17), Tiranti V(17), Younis R(18),Maher ER(19,)(20), Spencer J(5), Straatman-Iwanowska A(21), GissenP(1,)(21,)(22), Selim LA(23), Pintos-Morell G(24), Coroleu-Lletget W(25),Mohammad SS(26), Yoganathan S(27), Dale RC(26), Thomas M(27), Rihel J(2), BodamerOA(6), Enns CA(4), Hayflick SJ(12,)(28,)(29), Clayton PT(1), Mills PB(1), KurianMA(3), Wilson SW(2).  Mutations in SLC39A14 disrupt manganese homeostasis and cause childhood-onsetparkinsonism-dystonia.  Nat Commun. 2016 May 27;7:11601. doi: 10.1038/ncomms11601.  **Author information:**  (1)Genetics and Genomic Medicine, UCL Institute of Child Health, University College London, London WC1N 1EH, UK. (2)Department of Cell and Developmental Biology, University College London, London WC1E 6BT, UK. (3)Developmental Neurosciences, UCL Institute of Child Health, University College London, London WC1N 1EH, UK. (4)Department of Cell, Development and Cancer Biology, Oregon Health &Sciences University, Portland, Oregon 97239, USA. (5)Department of Chemistry, School of Life Sciences, University of Sussex, Brighton BN1 9QJ, UK. (6)Division of Genetics and Genomics, Department of Medicine, Boston Children's Hospital and Harvard Medical School, Boston, Massachusetts 02115, USA. (7)Division of Genetics and Molecular Medicine, King's College London School of Medicine, London SE1 9RT, UK. (8)Department of Radiology, Great Ormond Street Hospital for Children NHS Trust, London WC1N 3JH, UK. (9)Developmental Biology and Cancer, UCL Institute of Child Health and Department of Histopathology, Great Ormond Street Hospital for Children NHS Trust, London WC1N 3JH, UK. (10)Department of Pathology, Oregon Health &Science University, Portland, Oregon 97239, USA. (11)Developmental Biology and Cancer Programme, UCL Institute of Child Health, University College London, London WC1N 1EH, UK. (12)Department of Molecular &Medical Genetics, Oregon Health &Science University, Portland, Oregon 97239, USA. (13)Institute of Neurology, University College London, London WC1N 3BG, UK. (14)Alzheimer's Disease Research Centre, Department of Neurology, Harvard Medical School and Massachusetts General Hospital, Charlestown, Massachusetts 02129, USA. (15)Institute of Human Genetics, Technische Universität München, Munich 81675, Germany. (16)Institute of Human Genetics, Helmholtz Zentrum München, German Research Center for Environmental Health, Neuherberg 85764, Germany. (17)Unit of Molecular Neurogenetics, IRCCS, Foundation Neurological Institute 'C. Besta', Milan 20133, Italy. (18)Department of Medical and Molecular Genetics, University of Birmingham, Birmingham B15 2TT, UK. (19)Centre for Rare Diseases and Personalised Medicine, School of Clinical and Experimental Medicine, College of Medical and Dental Sciences, University of Birmingham, Birmingham B15 2TT, UK. (20)Department of Medical Genetics, School of Clinical Medicine, University of Cambridge, and Cambridge NIHR Biomedical Research Centre, Cambridge CB2 0QQ, UK. (21)MRC Laboratory for Molecular Cell Biology and Cell Biology Unit, University College London, London WC1E 6BT, UK. (22)Department of Metabolic Medicine, Great Ormond Street Hospital for Children NHS Trust, London WC1N 3JH, UK. (23)Department of Paediatric Neurology, Faculty of Medicine, Cairo University Children's Hospital, Cairo 11432, Egypt. (24)Department of Paediatrics, Section of Paediatric Nephrology, Genetics and Metabolism, Unit of Rare Diseases, University Hospital 'Germans Trias I Pujol', Universitat Autònoma de Barcelona, Badalona 08916, Spain. (25)Department of Paediatrics, Paediatric Neurology and Neonatology Unit, University Hospital 'Germans Trias I Pujol', Badalona 08916, Spain. (26)Neuroimmunology Group, Institute for Neuroscience and Muscle Research, Kids Research Institute at the Children's Hospital at Westmead, University of Sydney, Westmead NSW 2145, Australia. (27)Department of Neurological Sciences, Christian Medical College Hospital, Vellore 632 004, India. (28)Department of Neurology, Oregon Health &Science University, Portland, Oregon 97239, USA. (29)Department of Pediatrics, Oregon Health &Science University, Portland, Oregon 97239, USA.  Although manganese is an essential trace metal, little is known about its transport and homeostatic regulation. Here we have identified a cohort of patients with a novel autosomal recessive manganese transporter defect caused by mutations in SLC39A14. Excessive accumulation of manganese in these patients results in rapidly progressive childhood-onset parkinsonism-dystonia with distinctive brain magnetic resonance imaging appearances and neurodegenerative features on post-mortem examination. We show that mutations in SLC39A14 impair manganese transport in vitro and lead to manganese dyshomeostasis and altered locomotor activity in zebrafish with CRISPR-induced slc39a14 null mutations. Chelation with disodium calcium edetate lowers blood manganese levels in patients and can lead to striking clinical improvement. Our results demonstrate that SLC39A14 functions as a pivotal manganese transporter in vertebrates.  DOI: 10.1038/ncomms11601 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4894980  **PMID:**27231142 |
|  | Ullah E(1), Nadeem Saqib MA(2), Sajid S(3), Shah N(3), Zubair M(4), Khan MA(5),Ahmed I(6), Ali G(7), Dutta AK(8), Danda S(8), Lao R(9), Ling-Fung Tang P(9),Kwok PY(9), Ansar M(10), Slavotinek A(11).  Genetic analysis of consanguineous families presenting with congenital oculardefects.  Exp Eye Res. 2016 May;146:163-71. doi: 10.1016/j.exer.2016.03.014. Epub 2016 Mar16.  **Author information:**  (1)Department of Biochemistry, Quaid-i-Azam University, Islamabad, 45320, Pakistan; Department of Pediatrics, University of California, San Francisco, CA, USA. (2)Department of Biochemistry, Quaid-i-Azam University, Islamabad, 45320, Pakistan; Pakistan Medical Research Council, Islamabad, Pakistan. (3)Department of Biochemistry, Quaid-i-Azam University, Islamabad, 45320, Pakistan. (4)Gomal Centre of Biochemistry and Biotechnology, Gomal University, Dera Ismail Khan, Pakistan. (5)Gomal Centre of Biochemistry and Biotechnology, Gomal University, Dera Ismail Khan, Pakistan; Genomic Core Facility, Interim Translational Research Institute, Academic Health System, Hamad Medical Corporation, Doha, Qatar. (6)Department of Community Medicine, Gomal Medical College, Dera Ismail Khan, Khyber- Pakhtoonkhuwa, Pakistan. (7)Department of Biotechnology, University of Azad Jammu and Kashmir, Muzaffarabad, Azad Jammu & Kashmir, Pakistan. (8)Medical Genetics Unit, Christian Medical College, Vellore, India. (9)Cardiovascular Research Institute, University of California, San Francisco, CA, USA. (10)Department of Biochemistry, Quaid-i-Azam University, Islamabad, 45320, Pakistan. Electronic address: ansar@qau.edu.pk. (11)Department of Pediatrics, University of California, San Francisco, CA, USA. Electronic address: slavotia@peds.ucsf.edu.  Anophthalmia and microphthalmia (A/M) are a group of rare developmental disorders that affect the size of the ocular globe. A/M may present as the sole clinical feature, but are also frequently found in a variety of syndromes. A/M is genetically heterogeneous and can be caused by chromosomal aberrations, copy number variations and single gene mutations. To date, A/M has been caused by mutations in at least 20 genes that show different modes of inheritance. In this study, we enrolled eight consanguineous families with A/M, including seven from Pakistan and one from India. Sanger and exome sequencing of DNA samples from these families identified three novel mutations including two mutations in the Aldehyde Dehydrogenase 1 Family Member A3 (ALDH1A3) gene, [c.1310\_1311delAT; p.(Tyr437TrpfsJAN TO JUN44) and c.964G > A; p.(Val322Met)] and a single missense mutation in Forkhead Box E3 (FOXE3) gene, [c.289A > G p.(Ile97Val)]. Additionally two previously reported mutations were identified in FOXE3 and in Visual System Homeobox 2 (VSX2). This is the first comprehensive study on families with A/M from the Indian subcontinent which provides further evidence for the involvement of known genes with novel and recurrent mutations.  Copyright © 2016 Elsevier Ltd. All rights reserved.  DOI: 10.1016/j.exer.2016.03.014 | **INTL** | **JAN TO JUN** | **PMID:**26995144 |
|  | Uttarilli A(1,)(2), Ranganath P(1,)(3), Matta D(1), Md Nurul Jain J(1), PrasadK(1), Babu AS(1), Girisha KM(4), Verma IC(5), Phadke SR(6), Mandal K(6), PuriRD(5), Aggarwal S(1,)(3), Danda S(7), Sankar VH(8), Kapoor S(9), Bhat M(10),Gowrishankar K(11), Hasan AQ(12), Nair M(13), Nampoothiri S(14), Dalal A(1).  Identification and characterization of 20 novel pathogenic variants in 60unrelated Indian patients with mucopolysaccharidoses type I and type II.  Clin Genet. 2016 Dec;90(6):496-508. doi: 10.1111/cge.12795. Epub 2016 May 26.  **Author information:**  (1)Diagnostics Division, Centre for DNA Fingerprinting and Diagnostics, Hyderabad, India. (2)Graduate Studies, Manipal University, Manipal, India. (3)Department of Medical Genetics, Nizam's Institute of Medical Sciences, Hyderabad, India. (4)Department of Medical Genetics, Kasturba Medical College, Manipal, India. (5)Center of Medical Genetics, Sir Ganga Ram Hospital, New Delhi, India. (6)Department of Medical Genetics, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, India. (7)Department of Clinical Genetics, Christian Medical College and Hospital, Vellore, India. (8)Genetics Clinic, Department of Pediatrics, SAT Hospital, Government Medical College, Trivandrum, India. (9)Department of Pediatrics, Maulana Azad Medical College, New Delhi, India. (10)Centre for Human Genetics, Bengaluru, India. (11)Kanchi Kamakoti CHILDS Trust Hospital, Chennai, India. (12)Department of Genetics, Kamineni Hospital, Hyderabad, India. (13)Additional Professor in Pediatrics, Government Medical College, Manjeri, India. (14)Department of Pediatric Genetics, Amrita Institute of Medical Sciences, Kochi, India.  Mucopolysaccharidoses (MPS), a subgroup of lysosomal storage disorders, are caused due to deficiency of specific lysosomal enzyme involved in catabolism of glycosaminoglycans. To date more than 200 pathogenic variants in the alpha-l-iduronidase (IDUA) for MPS I and ∼500 pathogenic variants in the iduronate-2-sulphatase (IDS) for MPS II have been reported worldwide. The mutation spectrum of MPS type I and MPS type II disorders in Indian population is not characterized yet. In this study, we carried out clinical, biochemical, molecular and in silico analyses to establish the mutation spectrum of MPS I and MPS II in the Indian population. We conducted molecular analysis for 60 MPS-affected patients [MPS I (n = 30) (Hurler syndrome = 17, Hurler-Scheie syndrome = 13), and MPS II (n = 30) (severe = 18, attenuated = 12)] and identified a total of 44 [MPS I (n = 22) and MPS II (n = 22)] different pathogenic variants comprising missense, nonsense, frameshift, gross deletions and splice site variants. A total of 20 [MPS I (n = 14), and MPS II (n = 6)] novel pathogenic sequence variants were identified in our patient cohort. We found that 32% of pathogenic variants detected in IDUA were recurrent and 25% in MPS II. This is the first study revealing the mutation spectrum of MPS I and MPS II patients in the Indian population.  © 2016 John Wiley & Sons A/S. Published by John Wiley & Sons Ltd.  DOI: 10.1111/cge.12795 | **INTL** | **JUL TO DEC** | **PMID:**27146977 |
|  | van den Berg HM(1), Feldman B(2), Fischer K(3), Blanchette VS(4), Poonnoose P(5),Srivastava A(6).  Reply to the letter of O'Mahoney et al.: Patient-reported outcome is not confinedto HRQOL.  Haemophilia. 2016 May;22(3):e209-11. doi: 10.1111/hae.12933. Epub 2016 Apr 14.  **Author information:**  (1)Julius Centre for Health, Sciences and Primary Care University Hospital Utrecht, Utrecht, The Netherlands. (2)The Hospital for Sick Children, Rheumatology; HPME & PHS University of Toronto, Toronto, Ontario, Canada. (3)Van Creveldkliniek, UMCU, Utrecht, The Netherlands. (4)Hematology/Oncology, Hospital for Sick Children, Toronto, Ontario, Canada. (5)Flinders Medical Centre, Orthopaedics Christian Medical College, Vellore, TamilNadu, India. (6)Haematology, Christian Medical College, Vellore, TamilNadu, India.  DOI: 10.1111/hae.12933 | **INTL** | **JAN TO JUN** | **PMID:**27076036 |
|  | Varatharajan S(1), Panetta JC(2), Abraham A(1), Karathedath S(1), Mohanan E(1),Lakshmi KM(1), Arthur N(1), Srivastava VM(3), Nemani S(1), George B(1),Srivastava A(1), Mathews V(1), Balasubramanian P(4).  Population pharmacokinetics of Daunorubicin in adult patients with acute myeloidleukemia.  Cancer Chemother Pharmacol. 2016 Nov;78(5):1051-1058. Epub 2016 Oct 13.  **Author information:**  (1)Department of Haematology, Christian Medical College, Vellore, Tamilnadu, 632004, India. (2)Department of Pharmaceutical Sciences, St Jude Children's Research Hospital, Memphis, TN, USA. (3)Cytogenetics Unit, Christian Medical College, Vellore, Tamilnadu, 632004, India. (4)Department of Haematology, Christian Medical College, Vellore, Tamilnadu, 632004, India. bpoonkuzhali@cmcvellore.ac.in.  PURPOSE: Chemotherapy drug resistance and relapse of the disease have been the major factors limiting the success of acute myeloid leukemia (AML) therapy. Several factors, including the pharmacokinetics (PK) of Cytarabine (Ara-C) and Daunorubicin (Dnr), could contribute to difference in treatment outcome in AML.  METHODS: In the present study, we evaluated the plasma PK of Dnr, the influence of genetic polymorphisms of genes involved in transport and metabolism of Dnr on the PK, and also the influence of these factors on clinical outcome. Plasma levels of Dnr and its major metabolite, Daunorubicinol (DOL), were available in 70 adult de novo AML patients. PK parameters (Area under curve (AUC) and clearance (CL)) of Dnr and DOL were calculated using nonlinear mixed-effects modeling analysis performed with Monolix. Genetic variants in ABCB1, ABCG2, CBR1, and CBR3 genes as well as RNA expression of CBR1, ABCB1, and ABCG2 were compared with Dnr PK parameters.  RESULTS: The AUC and CL of Dnr and DOL showed wide inter-individual variation. Patients with an exon1 variant of rs25678 in CBR1 had significantly higher plasma Dnr AUC [p = 0.05] compared to patients with wild type. Patients who achieved complete remission (CR) had significantly lower plasma Dnr AUC, Cmax, and higher CL compared to patients who did not achieve CR.  CONCLUSION: Further validation of these findings in a larger cohort of AML patients is warranted before establishing a therapeutic window for plasma Dnr levels and targeted dose adjustment.  DOI: 10.1007/s00280-016-3166-8 | **INTL** | **JUL TO DEC** | **PMID:**27738808 |
|  | Varghese AM(1), Naina P(2), Cheng AT(3), Asif SK(4), Kurien M(5).  ACE grading-A proposed endoscopic grading system for adenoids and its clinicalcorrelation.  Int J Pediatr Otorhinolaryngol. 2016 Apr;83:155-9. doi:10.1016/j.ijporl.2016.02.002. Epub 2016 Feb 21.  **Author information:**  (1)Department of ENT, Christian Medical College, Vellore 632004, India. Electronic address: ajoymathew@gmail.com. (2)Department of ENT, Christian Medical College, Vellore 632004, India. Electronic address: drp.naina@hotmail.com. (3)Discipline of Paediatrics and Child Health, University of Sydney, Sydney, Australia; Department of Paediatric Otolaryngology, The Children's Hospital at Westmead, Sydney, Australia. Electronic address: atlcheng@bigpond.com. (4)Department of ENT, Christian Medical College, Vellore 632004, India. Electronic address: skamrann@gmail.com. (5)Department of ENT, Christian Medical College, Vellore 632004, India. Electronic address: kurien\_mary@hotmail.com.  OBJECTIVES: To propose a novel endoscopic adenoid grading system using a rigid nasal endoscope and to study its correlation with the clinical diagnosis.  METHODOLOGY: Prerecorded video clips of rigid nasal endoscopy taken during endoscopic adenoidectomy were retrieved. Otolaryngology consultants blinded to the clinical diagnosis of the child were presented these videos and asked to grade the adenoid hypertrophy as per the proposed endoscopic ACE (Airway/Choana/Eustachian tube) grading system. The clinical diagnosis was correlated with the different aspects of the descriptive endoscopic grading system.  RESULTS: 152 video clips were presented to the otolaryngology consultants for grading. The average age was 8.6 years (SD-3.48), while the male female ratio was 3:2. The A subcomponent of the ACE grading showed significant correlation with the diagnosis of sleep disordered breathing and chronic adenotonsillitis, C subcomponent with sleep disordered breathing and the E subcomponent with the diagnosis of otitis media.  CONCLUSION: The proposed endoscopic grading is easily applicable and at the same time clearly describes the relation of the adenoids to the nasopharynx, choana and Eustachian tube. Different aspects of the grading system correlated differently with the clinical diagnosis emphasizing that a descriptive scoring rather than a comprehensive scoring is a more relevant clinical tool.  Copyright © 2016 Elsevier Ireland Ltd. All rights reserved.  DOI: 10.1016/j.ijporl.2016.02.002 | **INTL** | **JAN TO JUN** | **PMID:**26968070 |
|  | Varghese J(1), James JV(1), Sagi S(1), Chakraborty S(1), Sukumaran A(1),Ramakrishna B(2), Jacob M(1).  Decreased hepatic iron in response to alcohol may contribute to alcohol-inducedsuppression of hepcidin.  Br J Nutr. 2016 Jun;115(11):1978-86. doi: 10.1017/S0007114516001197. Epub 2016Apr 15.  **Author information:**  (1)1Department of Biochemistry,Christian Medical College,Vellore, 632002,Tamilnadu,India. (2)2Department of Pathology,Christian Medical College,Vellore, 632004,Tamilnadu,India.  Hepatic Fe overload has often been reported in patients with advanced alcoholic liver disease. However, it is not known clearly whether it is the effect of alcohol that is responsible for such overload. To address this lacuna, a time-course study was carried out in mice in order to determine the effect of alcohol on Fe homoeostasis. Male Swiss albino mice were pair-fed Lieber-DeCarli alcohol diet (20 % of total energy provided as alcohol) for 2, 4, 8 or 12 weeks. Expression levels of duodenal and hepatic Fe-related proteins were determined by quantitative PCR and Western blotting, as were Fe levels and parameters of oxidative stress in the liver. Alcohol induced cytochrome P4502E1 and oxidative stress in the liver. Hepatic Fe levels and ferritin protein expression dropped to significantly lower levels after 12 weeks of alcohol feeding, with no significant effects at earlier time points. This was associated, at 12 weeks, with significantly decreased liver hepcidin expression and serum hepcidin levels. Protein expressions of duodenal ferroportin (at 8 and 12 weeks) and divalent metal transporter 1 (at 8 weeks) were increased. Serum Fe levels rose progressively to significantly higher levels at 12 weeks. Histopathological examination of the liver showed mild steatosis, but no stainable Fe in mice fed alcohol for up to 12 weeks. In summary, alcohol ingestion by mice in this study affected several Fe-related parameters, but produced no hepatic Fe accumulation. On the contrary, alcohol-induced decreases in hepatic Fe levels were seen and may contribute to alcohol-induced suppression of hepcidin.  DOI: 10.1017/S0007114516001197 | **INTL** | **JAN TO JUN** | **PMID:**27080262 |
|  | Varghese MJ(1), George OK(2).  Smoked out!  Eur Heart J. 2016 Mar 14;37(11):918. doi: 10.1093/eurheartj/ehv362. Epub 2015 Aug10.  **Author information:**  (1)Department of Cardiology, Christian Medical College, Vellore, India drmithunjv@gmail.com. (2)Department of Cardiology, Christian Medical College, Vellore, India.  DOI: 10.1093/eurheartj/ehv362 | **INTL** | **JAN TO JUN** | **PMID:**26261293 |
|  | Varghese V(1), Ramu P(2), Krishnan V(3), Saravana Kumar G(4).  Pull out strength calculator for pedicle screws using a surrogate ensemble approach.  Comput Methods Programs Biomed. 2016 Dec;137:11-22. doi: 10.1016/j.cmpb.2016.08.023. Epub 2016 Sep 6.  **Author information:**  (1)Department of Biotechnology, Indian Institute of Technology Madras, Chennai, Tamil Nadu, India. (2)Department of Engineering Design, Indian Institute of Technology Madras, Chennai, Tamil Nadu, India. (3)Spinal Disorder Surgery Unit, Department of Orthopedics, Christian Medical College, Vellore, Tamil Nadu, India. (4)Department of Engineering Design, Indian Institute of Technology Madras, Chennai, Tamil Nadu, India. Electronic address: [gsaravana@iitm.ac.in](mailto:gsaravana@iitm.ac.in).  BACKGROUND AND OBJECTIVE: Pedicle screw instrumentation is widely used in the treatment of spinal disorders and deformities. Currently, the surgeon decides the holding power of instrumentation based on the perioperative feeling which is subjective in nature. The objective of the paper is to develop a surrogate model which will predict the pullout strength of pedicle screw based on density, insertion angle, insertion depth and reinsertion. METHODS: A Taguchi's orthogonal array was used to design an experiment to find the factors effecting pullout strength of pedicle screw. The pullout studies were carried using polyaxial pedicle screw on rigid polyurethane foam block according to American society for testing of materials (ASTM F543). Analysis of variance (ANOVA) and Tukey's honestly significant difference multiple comparison tests were done to find factor effect. Based on the experimental results, surrogate models based on Krigging, polynomial response surface and radial basis function were developed for predicting the pullout strength for different combination of factors. An ensemble of these surrogates based on weighted average surrogate model was also evaluated for prediction. RESULTS: Density, insertion depth, insertion angle and reinsertion have a significant effect (p <0.05) on pullout strength of pedicle screw. Weighted average surrogate performed the best in predicting the pull out strength amongst the surrogate models considered in this study and acted as insurance against bad prediction. CONCLUSIONS: A predictive model for pullout strength of pedicle screw was developed using experimental values and surrogate models. This can be used in pre-surgical planning and decision support system for spine surgeon. Copyright © 2016 Elsevier Ireland Ltd. All rights reserved. DOI: 10.1016/j.cmpb.2016.08.023 | **INT** | **JUL TO DEC** | PMID: 28110717 |
|  | Varghese V(1), Saravana Kumar G(2), Krishnan V(3).  Effect of various factors on pull out strength of pedicle screw in normal andosteoporotic cancellous bone models.  Med Eng Phys. 2016 Dec 8. pii: S1350-4533(16)30293-4. doi:10.1016/j.medengphy.2016.11.012. [Epub ahead of print]  **Author information:**  (1)Biomedical Devices and Technology, Department of Biotechnology, IIT Madras, Chennai 600036, India. Electronic address: vicky.varghese@gmail.com. (2)Department of Engineering Design, IIT Madras, Chennai 600036, India. Electronic address: gsaravana@iitm.ac.in. (3)Spinal Disorder Surgery Unit, Department of orthopedics, Christian Medical College, Vellore 632004, Tamil Nadu, India. Electronic address: venkateshortho1@cmcvellore.ac.in.  Pedicle screws are widely used for the treatment of spinal instability by spine fusion. Screw loosening is a major problem of spine fusion, contributing to delayed patient recovery. The present study aimed to understand the factor and interaction effects of density, insertion depth and insertion angle on pedicle screw pull out strength and insertion torque. A pull out study was carried out on rigid polyurethane foam blocks representing osteoporotic to normal bone densities according to the ASTM-1839 standard. It was found that density contributes most to pullout strength and insertion torque. The interaction effect is significant (p < 0.05) and contributes 8% to pull out strength. Axial pullout strength was 34% lower than angled pull out strength in the osteoporotic bone model. Insertion angle had no significant effect (p > 0.05) on insertion torque. Pullout strength and insertion torque had no significant correlation (p > 0.05) in the case of the extremely osteoporotic bone model.  Copyright © 2016 IPEM. Published by Elsevier Ltd. All rights reserved.  DOI: 10.1016/j.medengphy.2016.11.012 | **INTL** | **JUL TO DEC** | **PMID:**27939099 |
|  | Varghese VD(1), Livingston A(1), Boopalan PR(1), Jepegnanam TS(1).  Valgus osteotomy for nonunion and neglected neck of femur fractures.  World J Orthop. 2016 May 18;7(5):301-7. doi: 10.5312/wjo.v7.i5.301. eCollection2016.  **Author information:**  (1)Viju Daniel Varghese, Abel Livingston, P R Boopalan, Thilak S Jepegnanam, Department of Orthopaedics-Unit 3, Christian Medical College, Vellore 632004, Tamil Nadu, India.  Nonunion neck of femur can be a difficult problem to treat, particularly in the young, and is associated with high complication rates of avascular necrosis due to the precarious blood supply and poor biomechanics. The various treatment options that have been described can be broadly divided according to the aim of improving either biology or biomechanics. Surgeries aimed at improving the biology, such as vascularized fibula grafting, have good success rates but require high levels of expertise and substantial resources. A popular surgical treatment aimed at improving the biomechanics-valgus intertrochanteric osteotomy-optimizes conditions for fracture healing by converting shear forces across the fracture site into compressive forces. Numerous variations of this surgical procedure have been developed and successfully applied in clinical practice. As a result, the proximal femoral orientation for obtaining a good functional outcome has evolved over the years, and the present concept of altering the proximal femoral anatomy as little as possible has arisen. This technical objective supports attaining union as well as a good functional outcome, since excessive valgus can lead to increased joint reaction forces. This review summarizes the historical and current literature on valgus intertrochanteric osteotomy treatment of nonunion neck of femur, with a focus on factors predictive of good functional outcome and potential pitfalls to be avoided as well as controversies surrounding this procedure.  DOI: 10.5312/wjo.v7.i5.301 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4865720  **PMID:**27190758 |
|  | Vaz T(1), Singh G.  Large-volume Epidural Blood Patch: An Alternative Technique.  J Neurosurg Anesthesiol. 2016 Feb 15. [Epub ahead of print]  **Author information:**  (1)Christian Medical College and Hospital Vellore, Tamil Nadu, India.  DOI: 10.1097/ANA.0000000000000285 | **INTL** | **JAN TO JUN** | **PMID:**26886863 |
|  | Vedantam A(1), Rajshekhar V(2).  Clinical adjacent-segment pathology after central corpectomy for cervicalspondylotic myelopathy: incidence and risk factors.  Neurosurg Focus. 2016 Jun;40(6):E12. doi: 10.3171/2016.2.FOCUS1626.  **Author information:**  (1)Department of Neurosurgery, Baylor College of Medicine, Houston, Texas; and. (2)Department of Neurological Sciences, Christian Medical College, Vellore, India.  OBJECTIVE The goal of this study was to investigate the prevalence and risk factors of clinical adjacent-segment pathology (CASP) following central corpectomy for cervical spondylotic myelopathy (CSM) or ossification of the posterior longitudinal ligament (OPLL). METHODS The authors reviewed 353 cases involving patients operated on by a single surgeon with a minimum 12-month follow-up after central corpectomy for CSM or OPLL between 1995 and 2007. Patients with symptoms consistent with CASP at follow-up were selected for the study. The authors analyzed the prevalence and risk factors for CASP after central corpectomy for CSM/OPLL. RESULTS Fourteen patients (13 male, 1 female; mean age 46.9 ± 7.7 years) were diagnosed with symptoms of CASP (3.9% of 353 patients) at follow-up. The mean interval between the initial surgery and presentation with symptoms of CASP was 95.6 ± 54.1 months (range 40-213 months). Preoperative Nurick grades ranged from 2 to 5 (mean 3.5 ± 1.2), and the Nurick grades at follow-up ranged from 1 to 5 (mean 3.0 ± 1.3, p = 0.27). Twelve patients had myelopathic symptoms and 2 had radiculopathy at follow-up. Patients with poorer preoperative Nurick grades had a higher risk for development of CASP (HR 2.6 [95% CI 1.2-5.3], p = 0.01). CONCLUSIONS In the present study, CASP was seen in 3.9% of patients following central corpectomy for CSM/OPLL. The risk of CASP after central corpectomy for CSM/OPLL was higher in patients with poorer preoperative Nurick grades.  DOI: 10.3171/2016.2.FOCUS1626 | **INTL** | **JAN TO JUN** | **PMID:**27246482 |
|  | Veeraraghavan B(1), Anandan S(1), Ragupathi NK(1), Vijayakumar S(1), SethuvelDP(1), Biswas I(2).  Draft Genome Sequence of Colistin-Resistant Acinetobacter baumannii StrainVB22595 Isolated from a Central Line-Associated Bloodstream Infection.  Genome Announc. 2016 Aug 11;4(4). pii: e00835-16. doi: 10.1128/genomeA.00835-16.  **Author information:**  (1)Department of Clinical Microbiology, Christian Medical College, Vellore, Tamil Nadu, India. (2)Department of Clinical Microbiology, Christian Medical College, Vellore, Tamil Nadu, India Department of Microbiology, Molecular Genetics and Immunology, University of Kansas Medical Center, Kansas City, Kansas, USA ibiswas@kumc.edu.  Acinetobacter baumannii is an important emerging pathogen that causes health care-associated infections. In this study, we determined the genome of a multidrug-resistant clinical strain, VB22595, isolated from a hospital in Southern India. The draft genome indicates that strain VB22595 encodes a genome of ~3.92 Mb in size and does not contain plasmid derived MCR-1 for colistin resistance.  Copyright © 2016 Veeraraghavan et al.  DOI: 10.1128/genomeA.00835-16 | **INTL** | **JUL TO DEC** | **PMCID: PMC**4982300  **PMID:**27516521 |
|  | Veeraraghavan B(1), Anandan S(2), Muthuirulandi Sethuvel DP(2), PuratchiveeranN(2), Walia K(3), Devanga Ragupathi NK(2).  Molecular Characterization of Intermediate Susceptible Typhoidal Salmonella toCiprofloxacin, and its Impact.  Mol Diagn Ther. 2016 Jun;20(3):213-9. doi: 10.1007/s40291-016-0191-6.  **Author information:**  (1)Department of Clinical Microbiology, Christian Medical College, 8th Floor, Asha Building, Vellore, 632 004, Tamil Nadu, India. vbalaji@cmcvellore.ac.in. (2)Department of Clinical Microbiology, Christian Medical College, 8th Floor, Asha Building, Vellore, 632 004, Tamil Nadu, India. (3)Division of Epidemiology and Communicable Diseases, Indian Council of Medical Research, Ansari Nagar, New Delhi, 110 029, India.  BACKGROUND AND OBJECTIVE: Extensive use of ciprofloxacin to treat Salmonella typhi infections has led to the emergence of resistance, resulting in clinical failure and delayed treatment response. Interpretative breakpoints for ciprofloxacin were revised by the Clinical and Laboratory Standards Institute (CLSI) and the European Committee on Antimicrobial Susceptibility Testing (EUCAST) in 2012. Since the majority of S. typhi isolates fall under the category of 'intermediate susceptible' as per CLSI criteria, we undertook molecular characterization to better define the susceptibility of these isolates. METHODS: Of 113 typhoidal Salmonella isolates collected during 2014, 33 (27 S. typhi and 6 S. paratyphi A) were randomly selected to determine the presence of chromosomal (gyrA, gyrB and parC), plasmid (qnrA, qnrB, qnrS and aac(6')-lb-cr), and efflux-mediated fluoroquinolone resistance. RESULTS: To the best of our knowledge, the parC mutation Glu(84)-Gly was observed for the first time in S. typhi in India. Of 33 isolates, only one harbored the qnrB gene, which is responsible for plasmid-mediated resistance. No significant change in efflux pump activity was observed for ciprofloxacin, except one that showed a fivefold decrease. Ninety-six percent of isolates with intermediate minimum inhibitory concentration to ciprofloxacin (CLSI) had mutations in the gyrA and parC genes, which might translate to possible/probable clinical failure in patients if treated with ciprofloxacin. In contrast, the EUCAST criteria define these isolates as resistant and may result in appropriate therapy with reduced morbidity. CONCLUSION: It was clear that the molecular mechanism of ciprofloxacin resistance correlates better with the EUCAST criteria than the CLSI criteria, which is also in agreement with the pefloxacin results, suggesting it as a surrogate marker for identifying fluoroquinolone susceptibility. DOI: 10.1007/s40291-016-0191-6 | **INTL** | **JAN TO JUN** | **PMID:**26951258 |
|  | Veeraraghavan B(1), Anandan S(2), Rajamani Sekar SK(2), Gopi R(2), DevangaRagupathi NK(2), Ramesh S(2), Verghese VP(3), Korulla S(3), Mathai S(3), SangalL(4), Joshi S(4).  First Report on the Draft Genome Sequences of Corynebacterium diphtheriaeIsolates from India.  Genome Announc. 2016 Nov 23;4(6). pii: e01316-16. doi: 10.1128/genomeA.01316-16.  **Author information:**  (1)Department of Clinical Microbiology, Christian Medical College, Vellore, Tamil Nadu, India vbalaji@cmcvellore.ac.in. (2)Department of Clinical Microbiology, Christian Medical College, Vellore, Tamil Nadu, India. (3)Department of Child Health, Christian Medical College, Vellore, Tamil Nadu, India. (4)World Health Organisation, Country office, New Delhi, India.  We report here the draft genome sequences of five Corynebacterium diphtheria isolates of Indian origin. The C. diphtheriae isolates TH1141, TH510, TH1526, TH1337, and TH2031 belong to sequence type ST-50, ST-295, ST-377, ST-405, and ST-405, with an average genome size of 2.5 Mbp.  Copyright © 2016 Veeraraghavan et al.  DOI: 10.1128/genomeA.01316-16 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5122685  **PMID:**27881543 |
|  | Veeraraghavan B(1), Jayaraman R(2), John J(2), Varghese R(2), Neeravi A(2),Verghese VP(3), Thomas K(4).  Customized sequential multiplex PCR for accurate and early determination ofinvasive pneumococcal serotypes found in India.  J Microbiol Methods. 2016 Nov;130:133-135. doi: 10.1016/j.mimet.2016.09.007. Epub2016 Sep 10.  **Author information:**  (1)Department of Clinical Microbiology, Christian Medical College and Hospital, Vellore, India. Electronic address: vbalaji@cmcvellore.ac.in. (2)Department of Clinical Microbiology, Christian Medical College and Hospital, Vellore, India. (3)Department of Child Health, Christian Medical College and Hospital, Vellore, India. (4)Department of General Medicine, Christian Medical College and Hospital, Vellore, India.  For accurate and earlier detection of invasive pneumococcal serogroup/serotypes from India, we have rearranged the African sequence of multiplex PCR provided by the Centers for Disease Control and Prevention, USA. This modified approach can successfully be adapted for earlier serotype detection of 95% of the pneumococcal strains prevalent in India.  Copyright © 2016 Elsevier B.V. All rights reserved.  DOI: 10.1016/j.mimet.2016.09.007 | **INTL** | **JUL TO DEC** | **PMID:**27623479 |
|  | Veeraraghavan B(1), Neeravi AR(2), Devanga Ragupathi NK(2), Inbanathan FY(2),Pragasam AK(2), Verghese VP(3).  Whole-Genome Shotgun Sequencing of the First Observation of Neisseriameningitidis Sequence Type 6928 in India.  Genome Announc. 2016 Nov 3;4(6). pii: e01232-16. doi: 10.1128/genomeA.01232-16.  **Author information:**  (1)Department of Clinical Microbiology, Christian Medical College, Vellore, Tamil Nadu, India vbalaji@cmcvellore.ac.in. (2)Department of Clinical Microbiology, Christian Medical College, Vellore, Tamil Nadu, India. (3)Department of Child Health, Christian Medical College, Vellore, Tamil Nadu, India.  Neisseria meningitidis is one of the leading global causes of bacterial meningitis. Here, we discuss the draft genome sequences of two N. meningitides strains, isolated from bloodstream infections in two pediatric patients at a tertiary care hospital in South India. The sequence data indicate that strains VB13856 and VB15548 encode genomes of ~2.09 Mb in size with no plasmids.  Copyright © 2016 Veeraraghavan et al.  DOI: 10.1128/genomeA.01232-16 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5095480  **PMID:**27811110 |
|  | Veeraraghavan B(1), Perumalla SK(2), Devanga Ragupathi NK(2), Pragasam AK(2),Muthuirulandi Sethuvel DP(2), Inian S(2), Inbanathan FY(2).  Coexistence of Fosfomycin and Colistin Resistance in Klebsiella pneumoniae:Whole-Genome Shotgun Sequencing.  Genome Announc. 2016 Nov 23;4(6). pii: e01303-16. doi: 10.1128/genomeA.01303-16.  **Author information:**  (1)Department of Clinical Microbiology, Christian Medical College, Vellore, India vbalaji@cmcvellore.ac.in. (2)Department of Clinical Microbiology, Christian Medical College, Vellore, India.  Resistance to colistin is a major threat that limits therapeutic choices for treating carbapenem-resistant Klebsiella pneumoniae infections. Herein, we report the draft genome sequences of two colistin-resistant K. pneumoniae isolates (BA41763 and B6753). The sequence data indicate that BA41763 and B6753 contain genomes of ~5.9 and 5.7 Mb in size with several plasmids.  Copyright © 2016 Veeraraghavan et al.  DOI: 10.1128/genomeA.01303-16 | **INTL** | **JUL TO DEC** | **PMCID: PMC**5122681  **PMID:**27881539 |
|  | Velay A(1), Jeulin H(1,)(2), Eschlimann M(1), Malvé B(2), Goehringer F(3),Bensenane M(4), Frippiat JP(1), Abraham P(5), Ismail AM(5), Murray JM(6), CombetC(7), Zoulim F(7), Bronowicki JP(4), Schvoerer E(1,)(2).  Characterization of hepatitis B virus surface antigen variability and impact onHBs antigen clearance under nucleos(t)ide analogue therapy.  J Viral Hepat. 2016 May;23(5):387-98. doi: 10.1111/jvh.12498. Epub 2016 Jan 6.  **Author information:**  (1)EA 7300 'Stress, Immunité, Pathogènes', Université de Lorraine, Vandoeuvre-les-Nancy, France. (2)Laboratoire de Virologie, Centre Hospitalier Universitaire de Nancy, Vandoeuvre-les-Nancy, France. (3)Service des Maladies Infectieuses et Tropicales, Centre Hospitalier Universitaire de Nancy, Vandoeuvre-les-Nancy, France. (4)Service d'Hépato-gastroentérologie, Centre Hospitalier Universitaire de Nancy, Vandoeuvre-les-Nancy, France. (5)Department of Clinical Virology, Christian Medical College, Vellore, Tamil Nadu, India. (6)School of Mathematics and Statistics, UNSW Australia, Sydney, NSW, Australia. (7)Unité Inserm UI1052, Université de Lyon, Lyon, France.  For hepatitis B virus (HBV)-related chronic infection under treatment by nucleos(t)ide analogues (NUCs), HBsAg clearance is the ultimate therapeutic goal but very infrequent. We investigated how HBV envelope protein variability could lead to differential HBsAg clearance on NUCs. For 12 HBV genotype D patients receiving NUCs, six resolvers (HBsAg clearance) were compared to six matched nonresolvers (HBsAg persistence). PreS/S amino acid (aa) sequences were analysed with bioinformatics to predict HBV envelope antigenicity and aa covariance. To enrich our analyses on very rare resolvers, these were compared with other HBV genotype D strains in three characterized clinical cohorts including common chronically infected patients. The sT125M+sP127T combination was observed in four nonresolvers of six, corroborated by aa covariance analysis, associated with a lower predicted antigenicity than sT125T+sP127P. Concordant features within this HBV key functional domain, at positions 125 and 127, were reported from two of the three comparative cohorts. In our hands, a lower ELISA reactivity of HBV-vaccinated mice sera was observed against the sT125M mutant. In the S gene, 56 aa changes in minor variants were detected in non-resolvers, mainly in the major hydrophilic region, vs 28 aa changes in resolvers. Molecular features in patients showing HBsAg persistence on NUCs argue in favour of a different aa pattern in the HBV S gene compared to those showing HBsAg clearance. In nonresolvers, a decrease in HBs 'a' determinant antigenicity and more frequent mutations in the S gene suggest a role for the HBV envelope characteristics in HBsAg persistence. © 2016 John Wiley & Sons Ltd.  DOI: 10.1111/jvh.12498 | **Intl** | **JAN TO JUN** | **PMID:**26742490 |
|  | Velayutham P(1), Rajshekhar V(1), Chacko AG(1), Krothapalli Babu S(2).  Influence of Tumor Location and Other Variables on Predictive Value ofIntraoperative myogenic Motor-Evoked Potentials in Spinal Cord Tumor Surgery.  World Neurosurg. 2016 Aug;92:264-72. doi: 10.1016/j.wneu.2016.04.117. Epub 2016May 6.  **Author information:**  (1)Department of Neurological Sciences, Christian Medical College, Vellore, India. (2)Department of Neurological Sciences, Christian Medical College, Vellore, India. Electronic address: srinivas@cmcvellore.ac.in.  OBJECTIVE: To study the influence of tumor location (cervical vs. thoracic; extramedullary vs. intramedullary) on predictive value of intraoperative myogenic motor-evoked potentials (iMEP) changes in patients undergoing surgery for spinal cord tumors. METHODS: Three hundred patients retrospective data (91 intramedullary) and 209 (intradural extramedullary) with successful iMEP recordings were analyzed. Responses to transcranial electrical stimulation were recorded from the lower limb muscles. Preoperative clinical variables, iMEPs changes, and postoperative neurologic deficits were noted. Associations between categorical variables and outcome were analyzed with the Fisher exact test.  RESULTS: Of the 300 patients 28 (9.3%) had significant intraoperative worsening of iMEPs. New postoperative deficits occurred in 23 of these 28 patients. False-positive decreases in iMEPs were observed in 5 patients. There was a significant association between changes in iMEP and postoperative new motor deficits (P ≤ 0.0001). Multivariate analysis showed that patients with changes in iMEP undergoing surgery for thoracic segment tumors, with longer duration of symptoms (>12 months) and older age (≥21.5 years) were more likely to suffer postoperative neurological decline (odds ratio 4.1, P ≤ 0.001 and odds ratio 5.4 P ≤ 0.0001, respectively). The sensitivity of iMEPs was 100% and specificity 98.2%. The positive and negative predictive values were 82% and 100%; however, the sensitivity and specificity is similar in thoracic intramedullary (TIM) (n = 53) and cervical intramedullary tumors (n = 38) (both were 100% and 97%). The positive predictive value was significantly greater for TIM tumors (93% vs. 50%). CONCLUSIONS: A strong association was observed between worsening of iMEPs and postoperative new neurological deficits in patients with TIM tumor.  Copyright © 2016 Elsevier Inc. All rights reserved.  DOI: 10.1016/j.wneu.2016.04.117 | **INTL** | **JUL TO DEC** | **PMID:**27157282 |
|  | Venkatesan P(1), Tiwari A(2), Dasgupta R(1), Carey M(2), Kehlenbrink S(2),Wickramanayake A(2), Jambugulam M(1), Jeyaseelan L(3), Ramanathan K(3), HawkinsM(2), Thomas N(4).  Surrogate measures of insulin sensitivity when compared to euglycemichyperinsulinemic clamp studies in Asian Indian men without diabetes.  J Diabetes Complications. 2016 Mar;30(2):287-91. doi:10.1016/j.jdiacomp.2015.11.024. Epub 2015 Dec 2.  **Author information:**  (1)Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore, India. (2)Division of Endocrinology, Department of Medicine, Albert Einstein College of Medicine, Bronx, NY, USA. (3)Department of Biostatistics, Christian Medical College, Vellore, India. (4)Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore, India. Electronic address: nihal\_thomas@cmcvellore.ac.in.  AIM: Fasting surrogate measures of insulin sensitivity are increasingly used in research and clinical practice. To assess the reliability of these measures, we aimed to evaluate multiple fasting surrogate measures simultaneously in non-diabetic subjects in comparison with the euglycemic hyperinsulinemic clamp study. METHODS: Sixteen normoglycemic male South Indian subjects were studied. After an overnight fast, blood samples were collected for glucose, insulin and lipid profile measurements, and stepped euglycemic hyperinsulinemic clamp studies were performed on all subjects. Steady state glucose infusion rates (M value) during low and high insulin phases of the clamp were calculated. Correlation of M value with surrogate markers of insulin sensitivity was performed. Predictive accuracy of surrogate indices was measured in terms of Root Mean Squared Error (RMSE) and leave-one-out cross-validation-type RMSE of prediction using a calibration model. RESULTS: M values showed a strong and significant correlation (p<0.01) with the following surrogate markers: Fasting insulin (r=-0.714), Fasting glucose to insulin ratio (FGIR, r=0.747) and Raynaud index (r=0.714). FGIR had a significantly lower RMSE when compared with HOMA-IR and QUICKI. CONCLUSIONS: Among the surrogate measures, FGIR had the strongest correlation with M values. FGIR was also the most accurate surrogate measure, as assessed by the calibration model.Copyright © 2016 Elsevier Inc. All rights reserved. DOI: 10.1016/j.jdiacomp.2015.11.024 | **INTL** | **JAN TO JUN** | **PMID:**26718937 |
|  | Vijayakumar S(1), Rajenderan S(1), Laishram S(1), Anandan S(1), Balaji V(1),Biswas I(2).  Biofilm Formation and Motility Depend on the Nature of the Acinetobacterbaumannii Clinical Isolates.  Front Public Health. 2016 May 24;4:105. doi: 10.3389/fpubh.2016.00105.eCollection 2016.  **Author information:**  (1)Department of Clinical Microbiology, Christian Medical College , Vellore , India. (2)Department of Microbiology, Molecular Genetics and Immunology, University of Kansas Medical Center , Kansas City, KS , USA.  Acinetobacter baumannii is a nosocomial pathogen involved in various infections ranging from minor soft-tissue infections to more severe infections such as ventilator-associated pneumonia and bacteremia. The severity and the type of infections depend on the genetic and phenotypic variations of the strains. In this study, we compared the extent of biofilm formation and motility displayed by 60 multidrug-resistant A. baumannii clinical strains isolated from blood and sputum samples from patients from Southern India. Our results showed that isolates from the sputum samples formed significantly more robust biofilm compared to the blood isolates. On the other hand, we observed that the blood isolates were more motile than the sputum isolates. To the best of our knowledge, this is the first study that systematically evaluated the correlation between these two phenotypic traits and the nature of the isolates. DOI: 10.3389/fpubh.2016.00105 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4877508  **PMID:**27252939 |
|  | Vimala LR(1), Jasper A(1), Irodi A(1).  Non-Invasive and Minimally Invasive Imaging Evaluation of CSF Rhinorrhoea – aRetrospective Study with Review of Literature.  Pol J Radiol. 2016 Feb 29;81:80-5. doi: 10.12659/PJR.895698. eCollection 2016.  **Author information:**  (1)Department of Radiology, Christian Medical College, Vellore, India.  BACKGROUND: Localization of a cerebrospinal fluid [CSF] fistula is a diagnostic challenge. The choice of an optimal imaging technique is necessary to locate the site of CSF leak which is required for surgical/endoscopic repair of the CSF fistula. MATERIAL/METHODS: Retrospective analysis of imaging was performed in 33 patients who presented with symptoms suggestive of CSF rhinorrhoea over a period of two years. Either a bone defect on high resolution CT [HRCT] or CSF column extending extracranially from the subarachnoid space with or without brain/ meningeal herniation on magnetic resonance [MR] cisternography was considered positive for CSF leak. The MR imaging technique included 1-mm heavily T2-weighted [TR 2000 ms; TE-200 ms] fast spin echo study in coronal and sagittal planes. HRCT sections involved 0.625 to 0.8-mm sections in the coronal plane, with or without axial planes, through the paranasal sinuses, reconstructed in a sharp algorithm and acquired with the patient in prone position. Imaging findings were compared with endoscopic findings, being the gold standard for the assessment of CSF rhinorrhea. RESULTS: A total of 25 patients had a combination of HRCT and MR cisternography. The sensitivity, specificity, positive predictive value [PPV] and negative predictive value [NPV] of both MR cisternography and HRCT together were 93%, 100%, 100% and 50% respectively. Two patients underwent only MR cisternography, 5 patients underwent only HRCT and one patient underwent HRCT, MR cisternography and CT cisternography. Though PPV was 100% in the groups with HRCT alone, MR cisternography alone and combined CT cisternography, HRCT and MR cisternography, the results were not statistically significant as the number of patients in those groups was lower. CONCLUSIONS: Combination of MR cisternography and HRCT appears to be complementary, accurate and non-invasive and should be considered as optimal imaging modality for pre-op imaging in the evaluation of CSF rhinorrhoea. DOI: 10.12659/PJR.895698 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4774580  **PMID:**26985244 |
|  | Viswanath V(1), Danda D(2).  Inflammation, metabolism and adipokines: toward a unified theory.  Int J Rheum Dis. 2016 Jul;19(7):633-6. doi: 10.1111/1756-185X.12958.  **Author information:**  (1)Institute For Rheumatology and Immunology Sciences, Kerala, India. vishadv@gmail.com. (2)Department of Clinical Immunology and Rheumatology, Christian Medical College, Vellore, India.  DOI: 10.1111/1756-185X.12958 | **INTL** | **JUL TO DEC** | **PMID:**27538673 |
|  | Vyas R(1), Faith M(1), Selvakumar D(1), Pulimood A(1), Lee M(2).  Project-based faculty development for e-learning.  Clin Teach. 2016 Dec;13(6):405-410. doi: 10.1111/tct.12486. Epub 2016 Jan 18.  **Author information:**  (1)Medical Education Unit, Christian Medical College, Vellore, Tamil Nadu, India. (2)Tufts University School of Medicine, Tufts Medical Center, Boston, Massachusetts, USA.  BACKGROUND: The Christian Medical College, Vellore, in collaboration with Tufts University, Boston, conducted an advanced workshop in e-learning for medical faculty members in India. CONTEXT: E-learning can enhance educational reforms for today's computer-literate generation, and keep faculty members up to speed in a rapidly changing world. The purpose of this paper is to report on the design and evaluation of a project-based faculty member development programme focused on developing faculty members as educators and as peer trainers who can use e-learning for educational reforms. INNOVATION: During a 2-day workshop, 29 participants in groups of two or three developed 13 e-learning projects for implementation in their institutions. Evaluation of the workshop was through written feedback from the participants at the end of the workshop and by telephone interview with one participant from each project group at the end of one year. Content analysis of qualitative data was perfomed. The participants reported that they were motivated to implement e-learning projects and recognised the need for and usefulness of e-learning. The majority of projects (10 out of 13) that were implemented 'to some extent' or 'to a great extent' faced challenges with a lack of resources and administrative support, but faculty members were able to overcome them. E-learning can enhance educational reforms for today's computer-literate generation IMPLICATIONS: Designing feasible e-learning projects in small groups and obtaining hands-on experience with e-learning tools enhance the effectiveness of subsequent implementation. To successfully incorporate e-learning when designing educational reforms, faculty member training, continuing support and infrastructure facilities are essential. © 2016 John Wiley & Sons Ltd. DOI: 10.1111/tct.12486 | **INTL** | **JUL TO DEC** | **PMID:**26777995 |
|  | Weiss DJ(1), Rasko JE(2), Cuende N(3), Ruiz MA(4), Ho HN(5), Nordon R(6), WiltonS(7), Dominici M(8), Srivastava A(9).  Part 2: Making the "unproven" "proven".  Cytotherapy. 2016 Jan;18(1):120-3. doi: 10.1016/j.jcyt.2015.11.005.  **Author information:**  (1)Department of Medicine, University of Vermont, Burlington, Vermont, USA. ISCT Chief Scientific Officer 2014-2016. Chair, ISCT Pulmonary Committee 2013-2015. Electronic address: dweiss@uvm.edu. (2)Department of Cell & Molecular Therapies, Royal Prince Alfred Hospital, Centenary Institute, Sydney Medical School, University of Sydney, Sydney, Australia. ISCT Australia & New Zealand, Past Regional Vice President 2008-2012. (3)Andalusian Initiative for Advanced Therapies, Junta de Andalucía, Sevilla, Spain. Chair, ISCT EU LRA Committee, 2014-2016. (4)Bone Marrow Transplantation and Cell Therapy Unit, Associação Portuguesa de Beneficencia, SJ Rio Preto, Sao Paulo, Brazil. ISCT South & Central America, Past Regional Vice President 2013-2015. (5)Department of Obstetrics and Gynecology, College of Medicine, National Taiwan University, Taipei, Taiwan. ISCT Asia, Past Regional Vice President 2013-2015. (6)Graduate School of Biomedical Engineering, University of New South Wales, Sydney, Australia. ISCT Australia & New Zealand, Regional Vice-President 2014-2016. (7)Western Australian Neuroscience Research Institute, Centre for Comparative Genomics, Murdoch University, Perth, Australia. Member at large of the ISCT Presidential Task Force on the Use of Unproven Cellular Therapies. (8)Division of Oncology, Laboratory of Cellular Therapy, University of Modena & Reggio Emilia, Modena, Italy. ISCT President 2014-2016. Chair of the ISCT Presidential Task Force on the Use of Unproven Cellular Therapies. (9)Center for Stem Cell Research (a unit of inStem, Bengaluru), Department of Hematology, Christian Medical College, Vellore, India. Member at large of the ISCT Presidential Task Force on the Use of Unproven Cellular Therapies. DOI: 10.1016/j.jcyt.2015.11.005 | **INTL** | **JAN TO JUN** | **PMID:**26719203 |
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|  | Wilson BT(1,)(2), Stark Z(3), Sutton RE(1), Danda S(4), Ekbote AV(4), ElsayedSM(5,)(6), Gibson L(7), Goodship JA(1,)(2), Jackson AP(8), Keng WT(9), KingMD(10,)(11), McCann E(12), Motojima T(13), Murray JE(8), Omata T(13), Pilz D(14),Pope K(3), Sugita K(15), White SM(3,)(16), Wilson IJ(2).  The Cockayne Syndrome Natural History (CoSyNH) study: clinical findings in 102individuals and recommendations for care.  Genet Med. 2016 May;18(5):483-93. doi: 10.1038/gim.2015.110. Epub 2015 Jul 23.  **Author information:**  (1)Northern Genetics Service, Newcastle Upon Tyne NHS Foundation Trust, International Centre for Life, Newcastle upon Tyne, UK. (2)Institute of Genetic Medicine, Newcastle University, International Centre for Life, Newcastle upon Tyne, UK. (3)Murdoch Childrens Research Institute, Parkville, Victoria, Australia. (4)Clinical Genetics Unit, Christian Medical College, Vellore, India. (5)Medical Genetics Center, Korba, Cairo, Egypt. (6)Children's Hospital, Ain Shams University, Cairo, Egypt. (7)Paediatrics & Child Health, University College Cork, Cork, Republic of Ireland. (8)MRC Human Genetics Unit, Institute of Genetics and Molecular Medicine, University of Edinburgh, Edinburgh, UK. (9)Clinical Genetics, Hospital Kuala Lumpur, Kuala Lumpur, Malaysia. (10)Paediatric Neurology, Temple Street Children's University Hospital, Dublin, Republic of Ireland. (11)School of Medicine and Medical Science, University College Dublin, Dublin, Republic of Ireland. (12)Department of Clinical Genetics, Glan Clwyd Hospital, Rhyl, Denbighshire, UK. (13)Division of Child Neurology, Chiba Children's Hospital, Chiba, Japan. (14)Institute of Medical Genetics, University Hospital of Wales, Cardiff, UK. (15)Division of Child Health, Faculty of Education, Chiba University, Chiba, Japan. (16)Department of Paediatrics, University of Melbourne, Parkville, Victoria, Australia.  PURPOSE: Cockayne syndrome (CS) is a rare, autosomal-recessive disorder characterized by microcephaly, impaired postnatal growth, and premature pathological aging. It has historically been considered a DNA repair disorder; fibroblasts from classic patients often exhibit impaired transcription-coupled nucleotide excision repair. Previous studies have largely been restricted to case reports and small series, and no guidelines for care have been established. METHODS: One hundred two study participants were identified through a network of collaborating clinicians and the Amy and Friends CS support groups. Families with a diagnosis of CS could also self-recruit. Comprehensive clinical information for analysis was obtained directly from families and their clinicians. RESULTS AND CONCLUSION: We present the most complete evaluation of Cockayne syndrome to date, including detailed information on the prevalence and onset of clinical features, achievement of neurodevelopmental milestones, and patient management. We confirm that the most valuable prognostic factor in CS is the presence of early cataracts. Using this evidence, we have created simple guidelines for the care of individuals with CS. We aim to assist clinicians in the recognition, diagnosis, and management of this condition and to enable families to understand what problems they may encounter as CS progresses.Genet Med 18 5, 483-493. DOI: 10.1038/gim.2015.110 | **INTL** | **JAN TO JUN** | **PMCID: PMC**4857186  **PMID:**26204423 |
|  | Winston A B(1), Das Adhikari D(2), Das S(1), Vazhudhi K(1), Kumar A(1), ShanthiM(1), Agarwal I(3).  Drug poisoning in the community among children: a nine years' experience from atertiary care center in south India.  Hosp Pract (1995). 2016 Dec 16. [Epub ahead of print]  **Author information:**  (1)a Paediatric Emergency, Department of Paediatrics , Christian Medical College, Vellore. (2)b Department of Pharmacology and Clinical Pharmacology , Christian Medical College , Vellore. (3)c Child Health 2, Department of Paediatrics , Christian Medical College , Vellore.  OBJECTIVES: This study was performed to determine the incidence, demographic distribution, types and outcomes across various drug poisonings among children from south India. METHODS: This retrospective study included children less than 16 years who presented to the Pediatric Emergency Department with drug poisoning from the 1(st) of October 2004 to the 30th of September 2013. RESULTS: Out of the total 997 poisoning cases, 366 (36.71%) were contributed by drugs; mainly antiepileptics, central nervous system depressants, psychotropics, analgesic-antipyretics and natural drugs. Males and children of < 5 years were mostly affected. Although many children developed complications and required intensive care unit admissions, the total mortality rate was less than 1%. The incidence of drug poisoning showed a decreasing trend over the last 4 years. CONCLUSION: This study for the first time gives an elaborative insight into pediatric drug poisoning over a nine-year period from a Pediatric Emergency Department tertiary care center in south India. DOI: 10.1080/21548331.2017.1273734 | **INTL** | **JUL TO DEC** | **PMID:**27985284 |
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|  | Yadav VK(1), Sudhakar SV(2), Panwar J(2).  Pathognomonic MRI and MR spectroscopy findings in cerebral hydatid cyst.  Acta Neurol Belg. 2016 Sep;116(3):353-5. doi: 10.1007/s13760-015-0561-6. Epub2015 Nov 2.  **Author information:**  (1)Department of Radiology, Christian Medical College and Hospital, Vellore, Tamilnadu, India. vkyadav77@yahoo.co.in. (2)Department of Radiology, Christian Medical College and Hospital, Vellore, Tamilnadu, India.  DOI: 10.1007/s13760-015-0561-6 | **INTL** | **JUL TO DEC** | **PMID:**26525195 |
|  | Yenuberi H(1), Abraham A(2), Sebastian A(2), Benjamin SJ(3), Jeyaseelan V(4),Mathews JE(5).  A randomised double-blind placebo-controlled trial comparing stepwise oralmisoprostol with vaginal misoprostol for induction of labour.  Trop Doct. 2016 Oct;46(4):198-205. Epub 2016 Jan 19.  **Author information:**  (1)Registrar, Department of Obstetrics and Gynaecology, Christian Medical College, Vellore, Tamil Nadu, India. (2)Assistant Professor, Department of Obstetrics and Gynaecology, Christian Medical College, Vellore, Tamil Nadu, India. (3)Associate Professor, Department of Obstetrics and Gynaecology, Christian Medical College, Vellore, Tamil Nadu, India. (4)Lecturer, Department of Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India. (5)Professor, Department of Obstetrics and Gynaecology, Christian Medical College, Vellore, Tamil Nadu, India coronistrial@yahoo.co.in.  A comparison of induction of labour (IOL) using three doses of 25 µg vaginal misoprostol inserted at intervals of 4 h or more with a stepwise oral regime starting with 50 µg followed by two doses of 100 µg was studied in a double-blind placebo-controlled trial in a tertiary centre in South India. Primary outcome was vaginal delivery in 24 h. Significantly more women in the first group required oxytocin augmentation and a third dose of the drug than women in the second group. Uterine tachysystole and other maternal and neonatal complications were similar. Thus it is concluded that women induced with oral, as compared to vaginal misoprostol are more likely to labour without oxytocin. © The Author(s) 2016. DOI: 10.1177/0049475515624856 | **INTL** | **JUL TO DEC** | **PMID:**26787644 |
|  | Yoganathan S(1), Arunachal G(2), Sudhakar SV(3), Rajaraman V(4), Thomas M(1), Danda S(2).  Beta Propellar Protein-Associated Neurodegeneration: A Rare Cause of Infantile Autistic Regression and Intracranial Calcification.  Neuropediatrics. 2016 Apr;47(2):123-7. doi: 10.1055/s-0035-1571189. Epub 2016 Feb 9.  **Author information:**  (1)Department of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, India. (2)Department of Medical Genetics, Christian Medical College, Vellore, Tamil Nadu, India. (3)Department of Radiodiagnosis, Christian Medical College, Vellore, Tamil Nadu, India. (4)Division of Child and Adolescent Psychiatry, Department of Psychiatry, Christian Medical College, Vellore, Tamil Nadu, India.  Neurodegeneration with brain iron accumulation (NBIA) is a heterogeneous group of single gene disorders with distinguished clinical phenotypes and definitive imaging findings. Beta propeller protein-associated neurodegeneration (BPAN) is a subentity of NBIA with X linked dominant inheritance. In this report, we describe a girl with autistic regression, seizures, intracranial calcification, iron accumulation in substantia nigra, and globi pallidi, and diagnosis of BPAN was established based on the identification of previously described disease causing variant in WD repeat domain 45 (WDR45) gene encoding for β propeller protein. This is the first genetically proven case from India. BPAN is an underrecognized disorder and must be considered as a differential diagnosis in children with atypical Rett features and should be enlisted among the causes for autistic regression and intracranial calcification. Pediatricians must be aware of this rare entity for establishing early diagnosis, prognostication, and genetic counseling. Treatment is usually supportive. More research is needed to explore drugs in the management of BPAN that can facilitate the autophagy and promotes cytoprotection. Georg Thieme Verlag KG Stuttgart · New York. DOI: 10.1055/s-0035-1571189 | **INTL** | **JAN TO JUN** | **PMID:**26859818 |
|  | Yoganathan S(1), Sudhakar SV(2), James EJ(3), Thomas MM(1).  Acute necrotising encephalopathy in a child with H1N1 influenza infection: aclinicoradiological diagnosis and follow-up.  BMJ Case Rep. 2016 Jan 11;2016. pii: bcr2015213429. doi: 10.1136/bcr-2015-213429.  **Author information:**(1)Department of Neurological Sciences, Christian Medical College, Vellore,Tamilnadu, India. (2)Department of Radiodiagnosis, Christian Medical College,Vellore, Tamil Nadu, India. (3)Department of Pediatrics, Christian MedicalCollege, Vellore, Tamilnadu, India.  Acute necrotising encephalopathy of childhood (ANEC) is a fulminant disorder withrapid progressive encephalopathy, seizures and poor outcome. It has been reportedin association with various viral infections. We describe the clinicoradiologicalfindings and short-term follow-up in a child with H1N1 influenza-associated ANEC.Laminar, target or tricolour pattern of involvement of the thalami was seen onapparent diffusion coefficient images. Our patient had significant morbidity atdischarge despite early diagnosis and management with oseltamivir andimmunoglobulin. Repeat imaging after 3 months had shown significant resolution ofthalamic swelling, but there was persistence of cytotoxic oedema involvingbilateral thalami. She was pulsed with intravenous steroids and maintained on atapering schedule of oral steroids. This report emphasises the need for a highindex of suspicion to establish early diagnosis, promotion of widespreadimmunisation strategies to prevent influenza outbreak, and more research toestablish standard treatment protocols for this under-recognised entity.2016 BMJ Publishing Group Ltd.  DOI: 10.1136/bcr-2015-213429 | **INTL** | **JAN TO JUN** | **PMID:**26759402 |
|  | Yoganathan S(1), Sudhakar SV(2), Thomas M(3), Dutta AK(4), Danda S(4).  "Eye of tiger sign" mimic in an adolescent boy with mitochondrial membraneprotein associated neurodegeneration (MPAN).  Brain Dev. 2016 May;38(5):516-9. doi: 10.1016/j.braindev.2015.10.017. Epub 2015 Nov 18.  **Author information:**  (1)Department of Neurological Sciences, Christian Medical College, Vellore, India. (2)Department of Radiodiagnosis, Christian Medical College, Vellore, India. (3)Department of Neurological Sciences, Christian Medical College, Vellore, India. Electronic address: maya@cmcvellore.ac.in. (4)Department of Medical Genetics, Christian Medical College, Vellore, India.  Neurodegeneration with brain iron accumulation (NBIA) refers to an inheritedheterogeneous group of disorders pathologically characterized by focal brain irondeposition. Clinical phenotype, imaging findings and genotype are variable amongthe different types of this disorder. In this case report, we describe theimaging finding of an adolescent boy with mitochondrial membrane proteinassociated neurodegeneration (MPAN), a subentity of NBIA. Magnetic resonanceimaging of brain revealed hypointensity of globi pallidi with medial medullarylamina appearing as a hyperintense streak in T2 weighted images. Mild cerebellaratrophy in T2 weighted images and blooming of substantia nigra and globi pallid in susceptibility weighted images were also observed. Imaging findings inpatients with MPAN mimics the eye of tiger appearance in patients withpantothenate kinase associated neurodegeneration. Classical phenotype and eye oftiger sign mimic in imaging of patients with NBIA should raise the suspect forMPAN. Genetic studies helps in the confirmation of diagnosis of thisneurodegenerative disorder.Copyright © 2015 The Japanese Society of Child Neurology. Published by ElsevierB.V. All rights reserved.DOI: 10.1016/j.braindev.2015.10.017 | **INTL** | **JUL TO DEC** | **PMID:**26602591 |

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| **MONTH & YEAR** | **INTERNATIONAL** | **NATIONAL** | **TOTAL** |
| **JANUARY - JUNE 2016** | **149** | **97** | **246** |
| **JULY – DECEMBER 2016** | **198** | **97** | **295** |
| **TOTAL =** | **347** | **194** | **541** |