Christian Medical College
VELLORE

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Research Digest

Research Digest

Editor's Message:

Dear Friends,

The annual research digest was initiated by Dr Prathap Tharyan in the year 2007 in an effort to inform the community as to capacity and caliber of research performed in CMC, Vellore. The work was astutely continued and enriched by his successor, Dr Gagandeep Kang.

CMC has a research output that has grown significantly since the turn of the millennium. The huge supportive clinical and excellent laboratory services coupled with the vibrant community programmes have helped enhanced this research output.

The other phenomenon is that there seems to be a significant growth of the total number of indexed publications from under 200 per annum 7 years ago to around 600 or more per annum at the present point of time.

The current research digest has a total of 414 publications for the year 2012 that have been extracted in part by Dodd library and also by the faculty who inform both the research office and Dodd that they have done. Therefore, it is an important exercise, and particularly where individuals are on study leave or sabbatical, that these publications need to be intimated to us, or else they may go unlisted, since the origin of the publication may not show up on PUBMED as CMC, Vellore in origin.

The list presented here may not necessarily be complete nor exhaustive. It is up to you as folk in the CMC, Vellore community to let us know if there are more publications that need to be added on.

All in all, our efforts to do good research, is likely to change thinking and policy making on a long term basis. It will certainly enhance educational capacity, and give our clinical skills a sense of refinement by developing novel algorithms that may serve our patients better.

For it has been said: "Be diligent in these matters; give yourself wholly to them, so that everyone may see your progress."

I would like to thank Dr. Manivizhi for aiding the process of cataloguing these articles and Mr. Benedict S Noble for the process of extraction and compilation.

All the best! …and trust that these creations of wisdom may inspire some us to do more to contribute further to society.

Nihal Thomas MBBS MD MNAMS DNB(Endo)FRACP(Endo) FRCP(Edin)
Addl. Vice Principal (Research)

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Special request to CMC Faculty

Please use the online submission facility on the Dodd Library Website to submit details of all your indexed and non indexed publications. Please also send pdf or word files of your publications to dodd@cmcvellore.ac.in so that we can have copies of all publications.

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MBBS MD MNAMS DNB (Endo) FRACP (Endo) FRCP (Edin)
ADDL. VICE - PRINCIPAL (RESEARCH)

Abraham, A., Varatharajan, S., Abbas, S., Zhang, W., Shaji, R. V., Ahmed, R., George, B., Srivastava, A., Chandy, M., Mathews, V. and Balasubramanian, P.

Cytidine deaminase genetic variants influence RNA expression and cytarabine cytotoxicity inacute myeloid leukemiaPharmacogenomics; 2012, 13 (3): 269-282

Aim: Cytidine deaminase (CDA) irreversibly deaminates cytarabine (Ara-C), a key component of acute myeloid leukemia (AML) induction and consolidation therapy. CDA overexpression results in Ara-C resistance, while decreased expression is associated with toxicity. We evaluated factors influencing variation in CDA mRNA expression in adult AML patients and normal controls, and how they contributed to Ara-C cytotoxicity in AML cells. Materials & methods: CDA mRNA expression in 100 de novo AML patients and 36 normal controls were determined using quantitative reverse-transcriptase PCR. Genetic variants in the CDA gene were screened by direct sequencing. IC 50 of Ara-C was determined by 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide assay.Results: CDA RNA expression as well as Ara-C IC 50 showed wide variation in AML samples and normal controls. Fourteen sequence variants were identified, three of which (-33delC, intron 2 TCAT repeat and the 3untranslated region 816delC variants) showed significant association with RNA expression and the nonsynonymous coding variant 79A>C wasassociated with Ara-C cytotoxicity. Conclusion: CDA genetic variants explain the variation in RNA expression and may be candidates for individualizing Ara-C therapy. © 2012 Future Medicine Ltd.

Address: Christian Medical College, Vellore 632004, IndiaDepartment of Pediatrics, Institute of Human Genetics, University of Illinois at Chicago, Chicago, IL 60612, United States

Intl PMID:22304580 CO

Abraham, L. M., Braganza, A. D. and Simha, A. R.

Primary glaucoma in three siblings with Werner syndromeClinical and Experimental Ophthalmology; 2012. doi: 10.1111/j.1442-9071.2012.02880.x. [Epub ahead of print]

Address: Department of Ophthalmology Christian Medical College Vellore India

Intl PMID:22957764 CO

Abraham, V., Myla, Y., Verghese, S. and Chandran, B. S.

Morgagni-Larrey Hernia- a Review of 20 Cases. Indian Journal of Surgery; 2012, 74 (5): 391-395

Morgagni-Larrey hernia is an uncommon entity. The majority of the literature describes hernia occurring mostly on the right side, a few on the left side and rarely bilateral. Retrospective chart review was done for the patients with the diagnosis of adult diaphragmatic hernia from January 1997 to December 2010. Post-operative course was evaluated for outcome, morbidity and mortality. Out of 20 patients, 13 (65 %) were males and 7 (35 %) were females. Their age ranged from 17 to 50 years (mean = 29.6). Abdominal discomfort was the most common presentation. Eight patients (40 %) were asymptomatic at presentation. Plain X-Ray chest was done for all. Ten patients (50 %) underwent suture repair, 6 (30 %) had mesh placement and the other 4 (25 %) underwent both: suture repair buttressed with mesh. Volvulus of stomach was noted in 5 (25 %) cases. All patients had left sided hernia. There was insignificant morbidity and no mortality. There was no recurrence in 16 patients followed up for a mean duration of 20 months (range = 8 to 32 months). In Morgagni-Larrey hernia, abdominal approach gives good accessibility to reduce the hernia and to undertake repair. When complicated with incarceration, perforation, gangrene or volvulus of the herniated bowel; this can be dealt with ease. Plain X Ray of the chest is fairly accurate in suggesting the diagnosis ofMorgagni-Larrey hernia. © 2012 Association of Surgeons of India.

Address: Upper GI Surgery unit, Department of Surgery, Christian Medical College andHospital, Vellore, TN 632004, India

Nat CO

Ahmed, M., Joseph, E., Mani, S., Chacko, G. and Rajshekhar, V.

Cholesterol granuloma of the sphenoid sinus: An unusual sphenoid sinus lesion Neurology India; 2012, 60 (3): 332-333

Address: Department of Radiodiagnosis, Christian Medical College, Vellore, Tamil Nadu, IndiaDepartment of Pathology and Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, IndiaDepartment of Neurological Sciences, Christian Medical College, Vellore, Tamil Nadu, India

Nat PMID:22824698 CO

Ahmed, M., Sureka, J., Koshy, C. G., Chacko, B. R. and Chacko, G.

Langerhans cell histiocytosis of the clivus: An unusual cause of a destructive central skull base mass in a child Neurology India; 2012, 60 (3): 346-348

Address: Department of Radiodiagnosis, Christian Medical College, Vellore, Tamil Nadu, IndiaDivision of Neuropathology, Department of Pathology and Neurological Sciences, ChristianMedical College, Vellore, Tamil Nadu, India

PMID:22824707

Akasaka, R., Chiba, T., Dutta, A. K., Toya, Y., Mizutani, T., Shozushima, T., Abe, K., Kamei, M., Kasugai, S., Shibata, S., Abiko, Y., Yokoyama, N., Oana, S., Hirota, S., Endo, M., Uesugi, N., Sugai, T. and Suzuki, K.

Colonic mucosa-associated lymphoid tissue lymphoma Case Reports in Gastroenterology; 2012, 6 (2): 569-575

Colonic mucosa-associated lymphoid tissue (MALT) lymphomas are rare and a definitive treatment has not been established. Solitary or multiple, elevated or polypoid lesions are the usual appearances of MALT lymphoma in the colon and sometimes the surface may reveal abnormal vascularity. In this paper we report our experience with four cases of colonic MALT lymphoma and review the relevant literature. The first patient had a smooth elevated lesion in the rectum and histopathologic examination of the biopsy from the lesion showed centrocyte-like cells infiltrating the lamina propria. Endoscopic ultrasonography(EUS) revealed thickening of the submucosa and muscularis propria. The patient underwent radiation therapy, and 9 months later a repeat colonoscopy showed complete resolution of the lesion. In case 2, colonoscopy showed a polyp in the cecum; the biopsy was diagnostic of MALT lymphoma. EUS detected a hypoechoic lesion confined to the mucosal layer of the colonic wall. The patient underwent endoscopic mucosal resection of the lesion and after 6 years of follow-up there was no evidence of recurrence. The third patient had a sessile elevated lesion in the sigmoid colon for which she underwent sigmoidectomy. Pathological examination of the surgical specimen was suggestive of MALT lymphoma. The last patient had a smooth elevated lesion in the rectum and magnification endoscopy showed irregular vascular pattern. The patient underwent endoscopic submucosal dissection, and biopsy examination showed the tumor to be MALT lymphoma. Although rare, awareness of MALT lymphoma of the colon is important to evaluate the patient appropriately and to planfurther management. Copyright © 2012 S. Karger AG, Basel.

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PMID:23012617 **CO**

Alexander, S., Varughese, S., David, V. G., Kodgire, S. V., Mukha, R. P., Kekre, N. S., Tamilarasi, V., Jacob, C. K. and John, G. T.

Extensive emphysematous pyelonephritis in a renal allograft treated conservatively: Casereport and review of the literatureTransplant Infectious Disease; 2012, 14 (6): E150-E155

Emphysematous pyelonephritis (EPN) is a rare occurrence in renal allografts. An aggressive approach resulting in transplant nephrectomy is viewed as the standard of care. Over the recent years, treatment with percutaneous drainage (PCD) of the renal and perinephric collections and appropriate antibiotics has been reported with good success in lesser grades of this infection. Only 4 cases of extensive EPN disease with Escherichia coli, treated with conservative management, are reported in the English-language literature. We present a case of severe EPN caused by Klebsiella pneumoniae, successfully managed with early PCD, and propose a step-up strategy aimed toward graft preservation. © 2012 John Wiley &Sons A/S.

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Intl PMID:23025565 CO

Alwinesh, M. T. J., Joseph, R. B. J., Daniel, A., Abel, J. S., Shankar, S. R., Mammen, P., Russell, S. and Russell, P. S. S.
Psychometrics and utility of Psycho-Educational Profile-Revised as a developmental quotient measure among children with the dual disability of intellectual disability and autismJournal of Intellectual Disabilities; 2012, 16 (3): 193-203

There is no agreement about the measure to quantify the intellectual/developmental level in children with the dual disability of intellectual disability and autism. Therefore, we studied the psychometric properties and utility of Psycho-Educational Profile-Revised (PEP-R) as adevelopmental test in this population. We identified 116 children with dual disability fromthe day care and inpatient database of a specialised Autism Clinic. Scale and domain level scores of PEP-R were collected and analyzed. We examined the internal consistency, domain-total correlation of PEP-R and concurrent validity of PEP-R against Gesell's Developmental Schedule, inter-rater and test-retest reliability and utility of PEP-R among children with dual disability in different ages, functional level and severity of autism. Besides the adequate face and content validity, PEP-R demonstrates a good internalconsistency (Cronbach's á ranging from 0.91 to 0.93) and domain-total correlation (ranging from 0.75 to 0.90). The inter-rater reliability (intraclass correlation coefficient, ICC = 0.96) and test-retest reliability (ICC = 0.87) for PEP-R is good. There is moderate-to-high concurrent validity with GDS (r ranging from 0.61 to 0.82; all Ps = 0.001). The utility ofPEP-R as a developmental measure was good with infants, toddlers, pre-school and primary school children. The ability of PEP-R to measure the developmental age was good,irrespective of the severity of autism but was better with high-functioning children. ThePEP-R as an intellectual/developmental test has strong psychometric properties in children with dual disability. It could be used in children with different age groups and severity of autism. PEP-R should be used with caution as a developmental test in children with dual disability who are low functioning.

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Intl PMID:22833108 CO

Amritanand, R., Venkatesh, K. and Sundararaj, G. D.
Left second rib exostosis, spinal cord compression and left upper thoracic scoliosis: A rare triadAsian Spine Journal; 2012, 6 (3): 207-210

Exostosis of the rib with neural foraminal extension as a cause of spinal cord compression and scoliosis has to the best of our knowledge not been reported. We describe a youngmale with hereditary multiple exostosis who presented with a spastic gait, lower limbweakness and a deformity of the upper back. Radiographic imaging revealed a lesion arising from the left second rib which was encroaching the spinal canal and a scoliotic deformity of the upper thoracic spine. Through a single T shaped posterior approach he underwent a decompressive laminectomy of T1 and T2 vertebra and excision of the lesion. The diagnosis of osteochondroma was confirmed by histopathological studies. He was followed up at one year when his neurological condition had returned to normal however the scoliosis had increased.

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Intl PMID:22977702 CO

Ananthakrishnan, N., Arora, N. K., Chandy, G., Gitanjali, B., Sood, R., Supe, A. andNagarajan, S.
Is there need for a transformational change to overcome the current problems with postgraduate medical education in India?National Medical Journal of India; 2012, 25 (2): 101-108

In spite of the existence of a dual system of postgraduation, one under the Medical Council of India (MCI) and the other on a parallel track under the National Board of Examinations, postgraduate medical education in India is beset with several problems. For example, the curriculum has not been revised comprehensively for several decades. The diploma course under the MCI has become unpopular and is largely a temporary refuge for those who do not get admission to degree courses. The level of skills of the outgoing graduate is falling and the increase in the number of seats is taking place in a haphazard manner, without reference to the needs. In spite of increase in seats, there is a shortage of specialists at the secondary and tertiary care levels, especially in medical colleges,

to share teaching responsibilities. Further, the distribution of specialists is skewed, with some states having far more than others. To remedy these ills and fulfil the requirements of the country over the next two decades, a working group appointed by the erstwhile governors of the MCIwas asked to suggest suitable modifications to the existing postgraduate system. After an extensive review of the lacunae in the present system, the needs at various levels and the pattern of postgraduate education in other countries, it was felt that a competency-basedmodel of a 2-year postgraduate course across all specialties, the use of offsite facilities fortraining and a criterion-based evaluation system entailing continuous monitoring would go a long way to correct some of the deficiencies of the existing system. The details of the proposal and its merits are outlined for wider discussion and to serve as a feedback to the regulatory agencies engaged in the task of improving the medical education system inIndia. We feel that the adoption of the proposed system would go a long way in improving career options, increasing the availability of teachers and dissemination of specialists to the secondary and primary levels, and improving the quality of outgoing postgraduates. © The National Medical Journal of India 2012.

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Nat PMID:22686720 CO

Arockiaraj, J., Venkatesh, K., Amritanand, R., Sundararaj, G. D. and Nachimuthu, G.

Chondrosarcoma of the spinous process: A rare presentationAsian Spine Journal; 2012, 6 (4): 279-283

Chondrosarcomas are malignant cartilage forming tumours. They form the second most common primary malignant tumour involving the vertebral axis. We present a rare presentation of a secondary chondrosarcoma from the spinous process of lumbar vertebra and discussed its management. The main emphasis is on the rare presentation and the need for awareness and suspicion of the pathology. Copyright © 2012 by Korean Society of Spine Surgery.

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Intl PMID:23275812 CO

Asha, H. S., Seshadri, M. S., Paul, T. V., Abraham, O. C., Rupali, P. and Thomas, N.

Human immunodeficiency virus-associated lipodystrophy: An objective definition based on dual-energy x-ray absorptiometry-derived regional fat ratios in a south Asian populationEndocrine Practice; 2012, 18 (2): 158-169

Objective: To develop an objective definition of human immunodeficiency virus (HIV)- associated lipodystrophy by using regional fat mass ratios and to assess the utility of anthropometric and skinfold measurements in the initial screening for lipodystrophy.Methods: Male patients between 25 and 50 years old with proven HIV infection (highly active antiretroviral therapy [HAART]-naïve subjects and those receiving successful HAART) were studied and compared with body mass index (BMI)-matched HIV-negative control subjects. Anthropometric variables, body composition, dual-energy x-ray absorptiometry findings, and metabolic variables were compared among the 3 study groups and between those patients with and those without lipodystrophy.Results: Trunk fat/lower limb fat mass ratio >2.28 identified 54.3% of patients with HIV receiving HAART as having lipodystrophy and had the highest odds ratio for predicting metabolic syndrome. The “clinical diagnosis of lipodystrophy” and the “clinical scoring system” had too many false- positive and false-negative results. Triceps skinfold thickness (SFT)/BMI ratio d”0.49 and abdominal SFT/triceps SFT ratio >1.385 have good sensitivity but poor specificity in identifying lipodystrophy. In comparison with HAART-naïve patients with HIV, those receiving HAART had significantly higher insulin resistance, and a significantly greater proportion had impaired glucose

tolerance and dyslipidemia. Among patients receiving HAART, those with lipodystrophy had a greater degree of insulin resistance, higher triglyceride levels, and lower levels of high-density lipoprotein cholesterol.Conclusion: The trunk fat/lower limb fat mass ratio in BMI-matched normal subjects can be used to derive cutoff values to define lipodystrophy objectively in HIV-infected patients. Defining lipodystrophy in this way is better than other methods of identifying those patients with increased cardiovascular risk. Triceps SFT/BMI and abdominal SFT/triceps SFT ratios maybe useful as screening tools in resource-poor settings. Copyright © 2012 AACE.

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Intl PMID:21856599 CO

Azad, Z. R., Patil, A. K. B., Sivadasan, A., Mani, S. and Alexander, M.

Rapidly progressive SSPE masquerading as cerebral gliomatosisNeurology India; 2012, 60 (6): 656-657

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Nat PMID:23287340 CO

Bacon, P., Sivakumar, R., Danda, D. and Misra, R.

Vasculitis assessment and Takayasu aorto-arteritisIndian Journal of Rheumatology; 2012, 7 (3): 153-158

Assessment of disease activity using clinical instruments like Birmingham Vasculitis ActivityScore and Vasculitis Damage index has been extensively used both in trial and clinic setting. It has revolutionised outcome assessment for small size vasculitis as evidenced from studies carried out by the European vasculitis group. There is a need for clinical assessment tools for large vessel disease like Takayasu arteritis, which is seen more frequently in India. An attempt has been made by the Indian Rheumatology Association Vasculitis core group to validate instruments, like Disease Extent Index for Takayasu Arteritis (DEI.Tak), Indian Takayasu Activity Score (ITAS) and Takayasu Arteritis Damage Scores. Both DEI.Tak and ITAS have received interests from international investigators. Widespread usage of these instruments will pave the way to controlled clinical trials for TA.

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Nat CO

Balakumar, B. and Madhuri, V.

A retrospective analysis of loss of reduction in operated supracondylar humerus fracturesIndian Journal of Orthopaedics; 2012, 46 (6): 690-697

Background: Loss of reduction following closed or open reduction of displaced supracondylar fractures of the humerus in children varies widely and is considered dependent on stability of the fracture pattern, Gartland type, number and configuration of pins for fixation, technical errors, adequacy of initial reduction, and timing of the surgery. This study was aimed to evaluate the factors responsible for failure of reduction in operated pediatric supracondylar fracture humerus. Materials and Methods: We retrospectively assessed loss of reduction by evaluating changes in Baumann2 s angle, change in lateral rotation percentage, and anterior humeral line in 77 consecutive children who were treated with multiple Kirschner wire fixation and were available for followup. The intraoperative radiographs were compared with those taken immediately after surgery and 3 weeks postoperatively. Multivariate logistic regression analysis was performed by STATA 10. Results: Reduction was lost in 18.2% of the patients. Technical errors were significantly higher in those who lost reduction (P = 0.001; Odds Ratio: 57.63). Lateral pins had a significantly higher risk of losing reduction than cross pins (P = 0.029; Odds Ratio: 7.73). Other factors including stability of fracture configuration were not significantly different in the two groups. Conclusions: The stability of fracture fixation in supracondylar fractures in children is dependent on a technically good

pinning. Cross pinning provides a more stable fixation than lateral entry pins. Fracture pattern and accuracy of reduction were not important factors in determining the stability of fixation.

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Nat PMID:23325974 CO

Balakumar, B., Arora, S. and Palocaren, T.

Sjögren-Larsson syndrome - Unusual presentation with pathological femoral neck fracture: A case reportJournal of Pediatric Orthopaedics Part B; 2012, 21 (6): 583-586

Patients with Sjögren-Larsson syndrome, an autosomal recessive syndrome characterized by ichthyosis, spastic diplegia/quadriplegia, mental retardation and ocular features thatinclude pigmentary changes in the retina, rarely present to the orthopaedic surgeon. We detail a rare and unusual presentation of Sjögren-Larsson syndrome in an adolescent boy with bilateral femoral neck fractures. Copyright © Lippincott Williams & Wilkins.

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Intl PMID:22828186 CO

Balasubramanian, P., Chendamarai, E., Markose, P., Fletcher, L., Branford, S., George, B., Mathews, V., Chandy, M. and Srivastava, A.

International reporting scale of BCR-ABL1 fusion transcript in chronic myeloid leukemia:First report from IndiaActa Haematologica; 2012, 127 (3): 135-142

Achieving a major molecular response (MMR) is an important predictor of progression-free survival in chronic myeloid leukemia patients treated with imatinib. This requires accurate measurement of BCR-ABL1 transcripts normalized to a control gene, as well as defining a level (BCR-ABL1/control gene ratio) that will correlate with sustained clinical response. To make these measurements comparable between laboratories, an international scale (IS) is necessary. A BCR-ABL1/control gene ratio of 0.10% represents MMR in the IS. In collaboration with an international reference laboratory in Adelaide, S.A., Australia, we have established and validated a lab-specific conversion factor for expressing BCR-ABL1transcript levels in the IS. In this report, we explain the process and steps involved in obtaining a valid lab-specific conversion factor for expressing BCR-ABL1 transcript levels inthe IS. Copyright © 2012 S. Karger AG.

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Intl PMID:22249155 CO

Beck, M. M., Biswas, B., D'souza, A. and Kumar, R.

Benign metastasising leiomyoma after hysterectomy and bilateral salpingo-oophorectomyChinese Source; 2012, 18 (2): 153-155

Benign metastasising leiomyomatosis is a rare condition affecting women in thereproductive age-group with a history of uterine fibroids, who have undergone treatment by myomectomy or hysterectomy. It is characterised by development of multiple, indolent,smooth muscle tumours outside the uterus, most commonly in the lungs, and manifestsseveral years after the uterine surgery. We describe the case of a young woman, who had undergone total abdominal hysterectomy and bilateral salpingo-oophorectomy for multiple fibroids and a right ovarian cyst. After 5 years of being on oestrogen replacement therapy, she was detected to have benign metastasising leiomyoma, for which an additional laparotomy was performed. At laparotomy, removal of the pelvic mass was associated with several complications. The metastatic lesions in the lung responded well to progestogens (megestrol acetate) alone as evidenced by regression of the lesions detected at follow-up after 6 months and 1 year.

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Intl PMID:22477740 CO

Benjamin, S. J., Daniel, A. B., Kamath, A. and Ramkumar, V.

Anthropometric measurements as predictors of cephalopelvic disproportion: Can the diagnostic accuracy be improved?Acta Obstetricia et Gynecologica Scandinavica; 2012, 91 (1): 122-127

Objective. We assessed the efficacy of maternal anthropometric measurements and clinical estimates of fetal weight in isolation and in combination as predictors of cephalopelvicdisproportion (CPD). Design. Prospective cohort study. Setting. Tertiary care teaching hospital, two affiliated hospitals with facilities for conducting cesarean delivery and seven affiliated primary care facilities with no operation theaters. Sample. Primigravidae over 37 weeks' gestation attending these facilities during a 20-month period with a singleton pregnancy in vertex presentation. Methods. Several anthropometric measurements were taken in 249 primigravidae. Fetal weight was estimated. Differences in these measurements between the vaginal delivery and CPD groups were analyzed. The validity of these measurements in predicting CPD was analyzed by plotting receiver operating characteristic curves and by logistic regression analysis. Main outcome measure. Mode of delivery. Results. Maternal height, foot size, inter-trochanteric diameter and bis-acromial diametershowed the highest positive predictive values for CPD. Combining some maternal measurements with estimates of fetal weight increased predictive values modestly, which are likely to be greater if the estimates of fetal weight are close to the actual birth weight. Based on multivariate analysis the risk factors for CPD in our population were foot length d"23cm, inter-trochanteric diameter a;circ30cm and estimated fetal weight d"3 000g. Conclusions. Maternal anthropometric measurements can predict CPD to some extent. Combining maternal measurements with clinical estimates of fetal weight only enhances the predictive value to a relatively modest degree (positive predictive value 24%). © 2011 The Authors Acta Obstetricia et Gynecologica Scandinavica.

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Intl PMID:21895610 CO

Bhaskar, A.

A simple electronic stethoscope for recording and playback of heart soundsAmerican Journal of Physiology - Advances in Physiology Education; 2012, 36 (4): 360-362

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Intl CO

Bhuvaneshwari, S., Chandy, S. and Kumar, S.

A prospective, double-blinded, crossover study to determine the equivalence of the serum levels and the peak level toxicity of diphenylhydantoin (eptoinR)Journal of Clinical and Diagnostic Research; 2012, 6 (5): 783-786

Context: In India, phenytoin is often prescribed as twice daily or thrice daily dosage schedules. In the West, this practice has been changed to a once daily regimen in most ofthe cases. Can we in India follow suit? Is our physical and genetic make up with regards tothe phenytoin pharmacokinetics different? Does this necessitate a multiple dosing regimen to avoid adverse effects or even breakthrough seizures? Aims: This study was aimed at comparing 300mg once daily of phenytoin and 100mg tid of phenytoin in terms of its adverse effects, peak and trough serum concentrations. Settings and Design: Out patients attending the Neurology Department, Christian Medical College, Vellore, India. This was a prospective, randomized, double blinded, crossover study. Methods and Materials: Twenty- four patients were enrolled into the study. An informed consent was taken from them. Their liver and renal functions were checked. Their basal phenytoin levels were also estimated. Once the preliminary tests were found to be normal, the patients were inducted randomly into one of the two treatment arms, either 300mg once daily or 100mg thrice daily. Each arm was given for a 2 week period. Adverse effects were looked for and the peak andtrough phenytoin concentrations were estimated. Statistical Analysis Used: The mean, SDand the P values were obtained by the Per Protocol and the ITT (Intention to Treat) analysis of the trough and peak serum levels by using Wilcoxon's signed rank test. Results: One patient experienced an adverse effect in the once daily regimen as compared to no adverseeffects in the tid regimen. The adverse effect was not consequential to the patient.Statistically, the trough concentrations were not significantly different between the regimens, although the peak

concentrations of the once daily regimen were significantly higher. Conclusions: In conclusion, it can be said that the once daily regimen can be prescribed for Indian patients with epilepsy.

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Intl CO

Boopalan, P. R. J. V. C., Jepegnanam, T. S., Nithyananth, M., Venkatesh, K. and Cherian, V. M.

Functional outcome of biological condylar blade plating of subtrochanteric fracturesJournal of Orthopaedic Science; 2012, 17 (5): 567-573

Background: The aim of this study was to review highenergy subtrochanteric fractures treated biologically with the 95° angled blade plate, to assess the time to union and return to work, and to perform a functional evaluation using the traumatic hip rating scale. Patients and methods: This study is a retrospective review of 22 patients with 23 fractures. Twenty-one patients (96 %) with 22 fractures were available for analysis. The average age was 33 years (range 18-47). There were seventeen males and four females. The right side was involved in fifteen patients, the left in five patients, and one patient had bilateral fractures. Motor vehicle accident was the predominant mode of injury in eleven patients. Seven patients had other associated injuries. 32B2.1 (40 %) was the commonest fracture pattern according to the OTA classification. Results: The average follow-up period was 29 months (range 12-49). The mean time to fracture healing was 16 weeks (range 12-32). All patients returned to their prefracture occupation (100 %). Eighteen patients (86 %) healed without any additional surgery. The outcome according to the hip rating scale was excellentin ten patients and good in eleven patients. Two patients (9 %) required additional surgery. Conclusions: Biological fixation of subtrochanteric fractures using 95° CBP results in a high union rate with low morbidity and good functional outcome. © The Japanese Orthopaedic Association 2012.

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Intl PMID:22684692 CO

Boorugu, H. K. and Chrispal, A.

Cartap hydrochloride poisoning: A clinical experienceIndian Journal of Critical Care Medicine; 2012, 16 (1): 58-59

Cartap hydrochloride, a nereistoxin analog, is a commonly used low toxicity insecticide. We describe a patient who presented to the emergency department with alleged history ofingestion of Cartap hydrochloride as an act of deliberate self-harm. The patient wasmanaged conservatively. To our knowledge this is the first case report of Cartap hydrochloride suicidal poisoning. Cartap toxicity has been considered to be minimal, but a number of animal models have shown significant neuromuscular toxicity resulting in respiratory failure. It is hypothesized that the primary effect of Cartap hydrochloride is through inhibition of the [3H]-ryanodine binding to the Ca 2+ release channel in the sarcoplasmic reticulum in a dose-dependent manner and promotion of extracellular Ca 2+ influx and induction of internal Ca 2+ release. This results in tonic diaphragmatic contraction rather than paralysis. This is the basis of the clinical presentation of acute Cartap poisoning as well as the treatment with chelators namely British Anti Lewisite and sodium dimercaptopropane sulfonate.

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Nat PMID:22557838 CO

Borad, A. J., Allison, G. M., Wang, D., Ahmed, S., Karim, M. M., Kane, A. V., Moy, J., Hibberd, P. L., Ajjampur, S. S. R., Kang, G., Calderwood, S. B., Ryan, E. T., Naumova, E.,Khan, W. A. and Ward, H. D.

Systemic antibody responses to the immunodominant p23 antigen and p23 polymorphisms in children with cryptosporidiosis in BangladeshAmerican Journal of Tropical Medicine and Hygiene; 2012, 86 (2): 214-222

Cryptosporidium is a major cause of diarrhea in children in developing countries. However, there is no vaccine available and little is known about immune

responses to protective antigens. We investigated antibody responses to p23, a putative vaccine candidate, inchildren in Bangladesh with cryptosporidiosis and diarrhea (cases) and uninfected childrenwith diarrhea (controls), and p23 gene polymorphisms in infecting species. Serum IgM, IgG, and IgA responses to p23 were significantly greater in cases than controls after three weeks of follow-up. Cases with acute diarrhea had significantly greater serum IgA and IgM responses than those with persistent diarrhea, which suggested an association with protection from prolonged disease. The p23 sequences were relatively conserved among infecting species and subtype families. Although most children were infected with Cryptosporidium hominis, there was a cross-reactive antibody response to C. parvum antigen. These results support further development of p23 as a vaccine candidate.

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Intl PMID:22302851 CO

Chacko, B. R., Irodi, A., Jesudason, B. I. T. and Devasahayam, C. J.

Unusual mediastinal cystic lesions with air fluid levelTropical Doctor; 2012, 42 (4): 221-222

An air-fluid level within an enlarged mediastinal lymph node is unusual. We describe three patients who had mediastinal lymphadenopathy containing air-fluid levels. The differential diagnosis and approach are discussed.

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Intl PMID:22936372 CO

Chacko, B., Peter, J. V., Pichamuthu, K., Ramakrishna, K., Moorthy, M., Karthik, R. andJohn, G.

Cardiac manifestations in patients with pandemic (H1N1) 2009 virus infection needing intensive careJournal of Critical Care; 2012, 27 (1): 106.e1-106.e6

Purpose: To characterize the cardiac manifestations in severe pandemic (H1N1) 2009 virus [P(H1N1)2009v] infection. Materials and Methods: Adult patients admitted to the intensive care unit were recruited. Patients with an elevated troponin I (>1.5 ng/mL) and those requiring vasoactive agents had an echocardiogram. Myocardial injury was defined as elevated troponin I. Patients with reduced ejection fraction lower than 50% were diagnosed as having left ventricular systolic dysfunction. Myocarditis was presumed when myocardial injury was associated with global myocardial dysfunction. Myocardial injury and dysfunction were correlated with mortality and expressed as odds ratio (OR) with 95% confidence intervals (CI). Results: Thirty-seven patients presented at 6.4 (SD 3.2) days of illness. Four patients had valvular heart disease and 1 preexisting ischemic heart disease. Seventeen (46%) patients had evidence of myocardial injury. Twenty of 28 patients in whom an echocardiogram was clinically indicated had left ventricular systolic dysfunction. Of these,14 patients were diagnosed as having myocarditis, and most of them (12 patients)developed it early. Myocarditis was associated with longer duration of vasoactive agents (OR 1.46, 95% CI 1.06-2.02) and mortality. Patients with elevated troponin I had an increased risk of death (OR 8.7, 95% CI 1.5-60). A higher mortality was observed inpatients with left ventricular systolic dysfunction (OR

9.6, 95% CI 1.7-58) compared withthose in whom an echocardiogram was normal or not indicated. Conclusion: In our cohort of severe P(H1N1)2009v infection, myocardial injury and dysfunction was frequent and associated with high mortality. © 2012 Elsevier Inc.

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Intl PMID: 21737242 CO

Chandrasekharan, R., Thomas, M. and Rupa, V.

Comparative study of orbital involvement in invasive and non-invasive fungal sinusitisJournal of Laryngology and Otology; 2012, 126 (2): 152-158

Objective: To investigate differences in orbital involvement in patients with invasive versus non-invasive fungal sinusitis. Method: One hundred consecutive cases of fungal sinusitis were assessed clinically and by computed tomography scan to evaluate orbital involvement. Results: Clinical orbital involvement was more common in invasive (73.5 per cent) thannon-invasive (12.1 per cent) fungal sinusitis (p = 0.000). Computed tomography scanningshowed similar orbital involvement in both groups, except for erosion of the floor of the orbit, which was more common in patients with invasive fungal sinusitis (p = 0.01). Extra- ocular muscle enlargement (44.4 vs 4 per cent, p = 0.01) and optic atrophy (44.4 vs 0 per cent, p = 0.003) were more common in chronic than acute invasive fungal sinusitis. Four patients (16 per cent) with acute invasive fungal sinusitis had no evidence of orbital involvement on scanning, despite clinical evidence of optic atrophy.Conclusion: Orbital involvement is more common in invasive than non-invasive fungal sinusitis. The difference is more evident clinically than on computed tomography scanning. Patients with acute invasive fungal sinusitis may have limited evidence of orbital involvement on scanning, despite extensive clinical disease. © 2011 JLO (1984) Limited.

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Intl PMID:22182506 CO

Chilbule, S. K. and Madhuri, V.

Complications of pamidronate therapy in paediatric osteoporosisJournal of Children's Orthopaedics; 2012, 6 (1): 37-43

Purpose: Pamidronate, used for the treatment of paediatric osteoporosis, reduces the fracture rate and improves ambulatory status. Intravenous pamidronate therapy has knowncomplications which have not been stratified based on its dose and distribution. This studyaims to assess the early minor and major medical and late surgical complications and the effect of the dose and regimen of infusion on these events in paediatric osteoporosis. Study design: Retrospective cohort. Materials and methods: Three regimens for pamidronate infusion were followed in sequential periods in 10 years. Regimen A delivered 1.5 mg/kg/day as a single dose once in 3 months. Regimen B delivered 2 mg/kg/day for 3 days twice a year, while regimen C delivered 1 mg/kg/day for 3 days every 3-4 months. Adverse events were classified as early (major and minor) or late (surgical). Results: Forty-eight children received 158 infusions using one of the three regimens. Twenty-nine complications occurred in 24 children. A significant difference in the complication rate was present among the three regimens (P = 0.005). Nineteen children had minor complications, mainly febrile reaction or asymptomatic hypocalcaemia. Four major complications consisting of one seizure, one respiratory distress and two hypocalcaemic tetany were encountered, all with regimen B. Intraoperative complication faced was loss of position due to splintering of the cortex while rush rodding. This was seen in 20% of the long bone segments operated in those who received pamidronate as compared to 4.4% of the segments which were operated prior to the initiation of pamidronate therapy; the odds of splintering were 5.4times higher for those patients who were bone segment rodded after pamidronate therapy.Discussion: Intravenous pamidronate is associated with complications in 50% of children with paediatric osteoporosis, with a dose-dependent

significant difference. Major complications are not uncommon with higher doses and can be avoided by increasing the number of doses per year and decreasing the dose per cycle. Surgical difficulty, when possible, can be avoided by correcting any major deformities at presentation prior to the induction of pamidronate therapy. © 2012 EPOS.

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Intl PMID:23450233 CO

Choudhrie, A. V., Kumar, S. and Gopalakrishnan, G.

Residual amoebic liver abscess in a prospective renal transplant recipientSaudi journal of kidney diseases and transplantation : an official publication of the SaudiCenter for Organ Transplantation, Saudi Arabia; 2012, Saudi J Kidney Dis Transpl. 2012 Jan;23(1):99-101.23 (1): 99-101

Amoebic liver abscess (ALA) is by far the most common extraintestinal manifestation of invasive amoebiasis. The vast majority of these resolve with treatment; however, a small percentage of the treated ALAs are known to persist asymptomatically. Herein, we present a prospective renal allograft recipient with a residual liver abscess who had a successful renal transplant after treatment. In our opinion, persistence of a radiological finding of residual abscess in the absence of clinical disease does not appear to be a contraindication to renal transplantation.

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Intl PMID:22237227 CO

David, K. V., John, S. M., Venkatesan, S., Bhattacharji, S. and Tharyan, A.

Treating a homeless psychiatric patient: ethical challengesIndian journal of medical ethics; 2012, 9 (2): 124-126

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Nat PMID:22591876 CO

David, S., Matathia, S. and Christopher, S.

Mortality Predictors of Snake Bite Envenomation in Southern India-A Ten-YearRetrospective Audit of 533 PatientsJournal of Medical Toxicology; 2012, 8 (2): 118-123

Snake bite incidence is highest in Asia and sub-Saharan Africa. This retrospective audit of 533 adult patients, who had presented to the Emergency Department, collates clinical features, effect of pharmacologic interventions and the risk factors that influence morbidity and mortality. Dual toxicity, neurological and haematological, was observed in 30. 4% of patients. Laboratory evidence of haematotoxicity was demonstrated in 314 (58. 9%) and40% demonstrated clinical evidence of bleeding. However, 7. 3% of these patients did not have laboratory evidence of bleeding disorder (p<0. 001). Conversely, 60% did not have clinical evidence of bleeding, but demonstrated laboratory evidence of abnormal parameters. Acute kidney injury (AKI) was evident in 28% of patients and 15. 3% required haemodialysis. About 25% with no haematotoxicity showed evidence of AKI. The majority received 6-12 vials of poly-valent anti-snake venom. Hypersensitivity reaction rate was 8% and predominantly anaphylactoid in nature. The length of hospital stay ranged from 2 to 28 days and 20% required mechanical ventilation. Overall mortality rate was 7. 5% with significant association to AKI, haematotoxicity and assisted ventilation. The mortality rate was 18% in patients with pre-hospital delay more than 24 h, as against 5% when admitted within the above specified period (p=<0. 001). The strength of this study is the accrued information of over a period of 10 years of snake-bite management through the Emergency Department of a university hospital setting. The limitations are the retrospective study design and the rejection percentage of 15. 5% due to insufficient information from the total chart pool. © 2012 American College of Medical Toxicology.

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Intl PMID:22234395 CO

Dincy Peter, C. V., Chakrapani, A., Shah, S., Shah, A. and Srivastava, A.

Blastic plasmacytoid dendritic cell neoplasm presenting as fever with diffuse cutaneous nodulesIndian Journal of Dermatology; 2012, 57 (1): 45-47

A young man, presented with high-grade fever and disseminated asymptomatic skin lesions of 6-weeks duration. Cutaneous examination revealed multiple infiltrated monomorphicskin-colored papules and nodules upto 2×2 cm all over scalp, face, trunk and extremities. Light microscopy of nodules showed diffuse infiltration of dermis and subcutis by a tumorcomposed of medium to large cells with round to ovoid nuclei with fine chromatin, few withvisible nucleoli and scanty to moderate amounts of eosinophilic cytoplasm. Tumor cells were positive for CD4, CD8, CD56 and negative for CD30, terminal deoxynucleotidyl transferase and Alk-1. Excised axillary lymph node showed similar morphologic and immunohistochemical findings. There was bone marrow involvement with infiltrate of large atypical/ immature lymphoid cells. Diagnosis of blastic plasmacytoid dendritic cell neoplasm was made. This is a rare neoplasm. presenting commonly in the skin, with or without concurrent extracutaneous disease.

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Nat PMID:22470209 CO

D'sa, S., Singh, S. and Sowmya, S.

Opsoclonus in scrub typhus Journal of Postgraduate Medicine; 2012, 58 (4): 296-297

Scrub typhus is a mite borne infectious disease caused by Orientia tsutsugamushi. It is a common cause of undifferentiated febrile illness in the Indian subcontinent. We present a case of scrub typhus with a rare ophthalmic manifestation.Our patient presented with fever and opsoclonus, was diagnosed to have scrub typhus and completely improved upon treatment. Opsoclonus complicates various medical diseases, including viral infections, toxin, encephalitis, brain tumors, and paraneoplastic syndromes. There has been only one previously reported case of opsoclonus in scrub typhus. This phenomenon highlights theincreasingly complex presentation of common diseases. It also indicates there is much to be discovered about the immunopathogenesis of this infectious disease.

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Nat PMID:23298927 CO

Dutta, A. K., Chiba, T., Toya, Y., Mizutani, T., Kasugai, S., Matsuda, N., Shibata, S., Abiko, Y., Akasaka, R., Yokoyama, N., Oana, S., Hirota, S., Endo, M., Uesugi, N., Sugai, T. andSuzuki, K.

Unusual manifestation of gastric helicobacter pylori infectionCase Reports in Gastroenterology; 2012, 6 (2): 465-471

Infection with Helicobacter pylori (HP) is common in many parts of the world. While most patients are asymptomatic, it causes peptic ulcer disease and malignancy in some of them. Other rare conditions have occasionally been reported in association with this infection. We report a case of hypertrophic gastropathy caused by HP in a 52-year-old asymptomatic patient. He was found to have marked enlargement of the gastric mucosal folds on radiological imaging and endoscopy. A gastric mucosal biopsy showed HP colonization associated with neutrophilic inflammation. After exclusion of neoplasia, other infections and infiltrative disorders, HP was thought to be the cause of the gastric fold hypertrophy. The patient responded well to HP eradication therapy, with normalization of the gastric mucosal folds. HP infection should be considered in the differential diagnosis of hypertrophic gastropathy and treated accordingly.

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Intl PMID:22855662 CO

Ebenezer, J., Mathew, J. and George, M.

A second tongue?Journal of Postgraduate Medicine; 2012, 58 (4): 301-302

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Nat PMID:23298929 CO

Ekbote, A. V. and Danda, S.

A case report of fibular aplasia, tibial campomelia, and oligosyndactyly (FATCO) syndrome associated with klinefelter syndrome and review of the literatureFoot and Ankle Specialist; 2012, 5 (1): 37-40

Limb development is a complex regulated development phenomenon involving multiple genes. Fibular Aplasia, Tibial Campomelia and Oligosyndactyly (FATCO) syndrome (MIM#246570) is a syndrome of unknown genetic basis and inheritance with variable expressivity and penetrance. Its counterpart, Fuhrmann syndrome or Femoral- Fibularaplasia-Campomelia and Oligosyndactyly are a result of defect in the WNT7a gene located on the 3p25. Former is proposed to be a development dysplasia of defective dorso- ventral polarity assignment and distal limb development. Ectrodactyly and fibular a/hypoplasia (EFA, MIM# 113310) share the full phenotypic spectrum of FATCO syndrome,whether they are allelic disorders or represent two variable presentations in the spectrum of the same disorder is not an established fact. We report here one Indian patient withfindings of FATCO syndrome with associated Klinefelter syndrome. This is the first such report which is likely to be a co-incidental finding and has implications for geneticcounseling. © 2012 SAGE Publications.

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Intl PMID:21965580 CO

Ekbote, A. V., Mandal, K., Agarwal, I., Sinha, R. and Danda, S.

Fanconi- Bickel Syndrome: Mutation in an Indian patientIndian Journal of Pediatrics; 2012, 79 (6): 810-812

Fanconi -Bickel Syndrome (FBS) is described as an autosomal recessive Glycogen StorageDisorder type XI. The underlying enzyme defect is unknown. The gene GLUT2 maps to3q26.1-q26.3; encodes a facultative glucose transporter gene. A 6-y-old girl presented with the characteristic facial gestalt, glucose and galactose intolerance, proximal renal tubulardysfunction, hepatomegaly, and altered liver function. To confirm the diagnosis, mutationanalysis was performed. Patient showed homozygous mutation in exon 9 of GLUT2 gene1093 C>T, the mutation causing transition from arginine to stop codon at position 365 and causing premature termination of protein. The mutation was found to be causative as previously described. To the best of authors' knowledge this is first Indian patient everreported with a mutation. Genetic testing can be employed as a method of confirmingdiagnosis, especially where definitive mutation can be useful for prenatal diagnosis and prognostication.

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Nat PMID:21972075 CO

George, O. K. and Subhendu, M. S. K.

Recurrent and rapidly occurring pericardial tamponade in Erdheim Chester diseaseIndian Heart Journal; 2012, 64 (1): 103-105

Erdheim Chester disease is a very rare histiocytic disorder characterised by tissue infiltration by lipid laden histiocytes. The most common presentation is bone pains typically involving the long bones. Over time almost 50% of the patients develop extraosseous involvement. The prognosis depends on the extent and distribution of the extraskeletal manifestations. Cardiovascular involvement is seen in up to 40% of the patients and the most common manifestations are periaortic fibrosis and pericardial involvement. Respiratory distress, extensive pulmonary fibrosis, and cardiac failure are the most common causes of death in these patients. Cardiac tamponade has also been documented to causedeath in these patients. We describe a patient of Erdheim Chester disease who presentedwith recurrent and very rapidly occurring cardiac tamponade in a short duration of time and benefited from timely recognition and management.

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Nat PMID:22572439 CO

George, S. A., Manipadam, M. T. and Thomas, R.

Primary myelolipoma presenting as a nasal cavity polyp: A case report and review of the literature J Med Case Rep. 2012 May 14;6(1):127. doi: 10.1186/1752-1947-6-127.

Introduction: Myelolipomas are rare, benign tumors comprising mature adipose tissue and hematopoietic elements. The vast majority occur within the adrenal glands, but extra- adrenal myelolipomas have also been reported in the presacral region, retroperitoneum, mesentery, stomach, spleen, liver, mediastinum and lungs. Here, we present a case of primary myelolipoma occurring in an unusual site: the nasal cavity. To the best of our knowledge, we believe that this location for extra-adrenal myelolipoma has not been previously described in the literature. Case presentation: We report a case of primary myelolipoma occurring in the nasal cavity of a 48-year-old Asian woman. We describe the etiology, pathology and differential diagnosis of extra-adrenal myelolipomas, and review the literature. Conclusions: We chose to present this case because of its unusual location. Although myelolipomas are rare, we conclude that they it should be considered in the differential diagnosis of lesions in this site.

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Intl PMID:22584001 CO

Gnanamuthu, B. R. D., George, R., Pandya, N. R. and Thankachen, R.

An unusual tumor of rib diaphysis-report of a giant cell tumor and a brief review of literatureIndian Journal of Thoracic and Cardiovascular Surgery; 2012, 28 (2): 136-139

Giant Cell Tumor of bone (GCT) is a benign but aggressive tumor, which forms about 4-5% of primary bone tumors and 1-2% of all chest wall tumors. It arises in the epiphysis of bones. The epiphysis of a rib is in its head and tubercle posteriorly and hence a GCT arising in a rib's anterior aspect, its diaphysis, is rare. In this unusual position, it can be mistaken for other more common diaphyseal pathologies. Radiological images are often diagnostic. A needle biopsy is best avoided and a wide excision biopsy is the treatment of choice. Microscopically, multinucleated giant cells are seen amidst stromal cells. Giant cells like these are also seen in other diseases like the brown tumor of primary hyperparathyroidism. Giant cell lesions are never caused by secondary hyperparathyroidism. We present a case of a diaphyseal GCT of rib in a patient with secondary hyperparathyroidism who was successfully treated.

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Nat CO

Gnanamuthu, B. R. D., Phillip, M. A., Veeraiyan, P. and Pandya, N. R.

Intralobar pulmonary sequestration with bronchoesophageal fistula and cystic adenamatoid malformation in an adultIndian Journal of Thoracic and Cardiovascular Surgery; 2012, 28 (1): 31-32

Address: Department of CTVS, The Christian Medical College Hospital, Vellore, Tamil Nadu,632004, India

Nat CO

Goel, R., Danda, D., Avinash, B., Pulimood, A. B., Mathew, J. and Ramakrishna, B. S.

Clinico-pathological correlation of non specific inflammation in bowel histology with joint manifestation in a tertiary center in South India Rheumatol Int. 2012 Jan 19. [Epub ahead of print]

The aim of our study was to determine whether the pattern of arthropathy in patients with suspected enteropathic arthritis bore any relation to their gut histology and specifically tochronic nonspecific gut inflammation. Records of 39 patients with suspected enteropathicarthritis from rheumatology clinic between January 2006 and December 2008 who had undergone ileocolonoscopic biopsy were analyzed retrospectively. Patients were grouped into 3 categories, namely those with normal bowel histology, those with mild nonspecific chronic changes, and those with histology suggestive of inflammatory bowel disease. Patients with nonspecific chronic gut

inflammation had higher occurrence of axial involvement with or without peripheral articular involvement as compared to those with normal gut histology (8/9 vs. 10/21, P = 0.049), and this pattern was similar to that in patients with IBD. Wrist joint involvement was more common in patients with normal bowel histology (12/21) than the other two groups (P = 0.003). All groups had fared well onfollow up while taking treatment with sulphasalazine and methotrexate. © 2012 Springer- Verlag.

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Intl PMID: 22258457 CO

Goel, R., Danda, D., Mathew, J. and Chacko, A.

Pancreatitis in systemic lupus erythematosus - Case series from a tertiary care center in south IndiaOpen Rheumatology Journal; 2012, 6 (1): 21-23

Pancreatitis in Systemic Lupus Erythematosus (SLE) is a rare, but life threatening complication. We aimed to study the characteristics and treatment outcome of SLE patients with acute pancreatitis in comparison with those with abdominal pain due to causes otherthan pancreatitis. Records of SLE patients admitted in our ward with pain abdomen betweenJanuary 2008 and July 2010 were studied retrospectively. Of 551 SLE in-patients during the study period, 28 (5%) had abdominal pain and 11 (2%) of them were diagnosed to have acute pancreatitis. Five of the 11 patients had severe pancreatitis and 6 had mild pancreatitis. Seizures, arthritis and lack of prior use of steroids were significantly more common in patients with pancreatitis as compared to those with abdominal pain of non pancreatic origin. Seizure occurred more often in severe pancreatitis group as compared to mild pancreatitis. There was no difference in prevalence of lupus anticoagulant and anticardiolipin antibody (40%) between SLE patients with pancreatitis and those with other causes of abdominal pain. Conclusion: Association of pancreatitis in our cohort of SLE patients include withdrawal of maintenance dose of steroids, seizures and arthritis in univariate analysis. However there was no independent predictor of this complication in our study. © Goel et al.

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Intl CO

Gopisankar Balaji, G., Arockiaraj Justin, S. V. and Roy, A. C.

A rare case of closed pantalar dislocation combined with Lisfranc's injury-The unusual complexFoot and Ankle Surgery; 2012, 18 (3): e21-e24

Closed pantalar dislocation with associated Lisfranc's injury is a very rare injury. We report a rare case of such injury. Our patient had fall from height and presented with closed pantalar dislocation with Lisfranc's injury of the left foot and other multiple injuries. He was immediately operated and dislocation was reduced and was stabilised with multiple Kirschner wires. At the end of 1. year follow up, he had an AOFAS score of 78 and had painless ankle movements. To the best of our knowledge, this is the first case reported with such a rare combination of injury. © 2012 European Foot and Ankle Society.

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Intl PMID:22857970 CO

Gupta, G., Paul, M. R., Kumar, S., Devasia, A., Mahendri, N. V., Samuel, P., Kekre, N. S. and Chacko, N. K.

Does urinary metabolic assessment in idiopathic calcium nephrolithiasis matter? A matchedcase control study among Indian siblingsIndian Journal of Urology; 2012, 28 (4): 409-413

Objective: To identify the differences in urinary profile of a stone former and the matched member of the family. Patients and Methods: This prospective case-control study wasconducted from April 2006 to January 2008. Forty-one matched pairs from one geographicregion were recruited. Renal/ureteric idiopathic calcium nephrolithiasis in patients of 18 years and above were included as cases. Controls were of the same gender and first-degree relative with no urolithiasis or history. They were living together at least for the last 5 years and consuming minimum of two out of three major meals together per day. For cases and controls besides fluid intake, ambulatory serum analysis for calcium, phosphorus, uric acid, albumin-globulin ratio, sodium, potassium and bicarbonate was done. Ambulatory 24-hour urinalysis was done for urinary volume, calcium, phosphorus, oxalate, uric acid, citrate, magnesium, creatinine and urinary pH was measured. For controls X-ray and USG-Kidney- Ureter-Bladder was done to rule out stone disease. The statistical analysis was done using Mc-

Nemar test. Results: Of the 41, 31 cases (76%) were first-time stone formers. No statistical difference was found for 24-hour urinary calcium (P = 0.68), oxalate (P = 0.68), citrate (P = 0.45) and urinary volume (P = 0.14). All pairs had normal 24-hour urinary magnesium, uric acid and urinary pH. Conclusions: The urinary biochemical profile of idiopathic calcium nephrolithiasis was similar to the appropriately matched family member. It appears that an independent intrinsic factor may possibly be present and responsible for stone disease. The usefulness of urinary metabolic evaluation is seems to be of doubtful significance.

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Nat PMID:23449537 CO

Isaac, C. P. J., Sivakumar, A. and Kumar, C. R. P.

Lead levels in breast milk, blood plasma and intelligence quotient: A health hazard for women and infantsBulletin of Environmental Contamination and Toxicology; 2012, 88 (2): 145-149

Lead levels in human breast milk and blood plasma or serum were analyzed and qualitatively their intelligence quotient (I.Q.) studied. Samples at different stages of lactation, from 5 days to 51 weeks post partum, were collected from 25 healthy breast-feeding mothers in Ranipet Industrial area of Vellore district of Tamil Nadu and from 25 lactating mothers in the non-industrial areas of the same district. The samples from mothers in non-industrial area showed lower lead levels ranging from 5 to 25 µg/L whereas samples from mothers in industrial area showed higher lead levels ranging between 15 and44.5 µg/L. It was generally noticed that the lactating mothers from industrial area have lower I.Q. levels compared to mothers from non-industrial area. © 2011 Springer Science+Business Media, LLC.

Address: Environmental and Analytical Chemistry Division, VIT University, Vellore, TamilNadu, IndiaDepartment of Histopathology, Christian Medical College and Hospital, Vellore, Tamil Nadu, India

Intl PMID:22105937 CO

Ismail, A. M., Devakumar, S., Anantharam, R., Fletcher, G. J., Subramani, T., John, G. T., Daniel, D. and Abraham, P.

Low frequency of occult hepatitis B infection in anti-HBc seropositive blood donors: Experience from a tertiary care centre in South IndiaBlood Transfusion; 2012, 10 (2): 230-232

Address: Department of Clinical Virology, Christian Medical College, Ida Scudder Road 632,004 Vellore, IndiaDepartment Nephrology, Christian Medical College, Vellore, India

Department Immunohaematology and Transfusion Medicine, Christian Medical College, Vellore, India

Intl PMID:22153686 CO

Jacob, K. M. and Oommen, A. T.

A retrospective analysis of risk factors for meniscal co-morbidities in anterior cruciate ligament injuriesIndian Journal of Orthopaedics; 2012, 46 (5): 566-569

Background: The association of meniscal cartilage injury with anterior cruciate ligament(ACL) injury is well documented in literature. The aim of this study was to examine the relative risk factors for meniscal pathology at the time of arthroscopic ACL reconstruction. Materials and Methods: A review of the case records including both in-patient and out-patient charts of all patients who underwent arthroscopic ACL reconstruction during the preceding 3 years was performed by either of the authors. The relative incidences of associated meniscal pathologies were analyzed in correlation with age, side of injury, time to surgery, mode of injury, and gender as the risk factors. Statistical analysis was performed to obtain individual data correlation. Results: A total of 192 patients underwent ACL reconstruction during the 3-year time frame. Of these, complete data sets were available for 129 patients. Analysis revealed that the only factor that was statistically significant in raising the risk of meniscal pathology was the time to surgery (P = 0.001). There was a significant increase in medial, lateral, and both meniscal tears noted in cases operated beyond 24 weeks. Further, the incidence of medial meniscal tears as well aslateral meniscal tears increased with delay in presentation for surgery (P = 0.004). Mode of injury, age at presentation, sex, and side were not significantly associated with anincreased incidence

of meniscal pathology. Conclusion: The single factor that significantlyaffects incidence of meniscal co-morbidity in ACL injury is the delay in presentation (i.e. the time to surgery). The incidence of lateral meniscal tears as well as medial meniscal tears increased with delay in surgery. This should guide us toward recommending all patients irrespective of age, gender, or mode of injury to undergo early reconstruction, thereby reducing the likelihood of developing meniscal pathology.

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Nat PMID: 23162151 CO

Jacob, K. S.

Depression: A major public health problem in need of a multi-sectoral responseIndian Journal of Medical Research; 2012, 136 (4): 537-539

Address: Department of Psychiatry, Christian Medical College, Vellore 632 002, India

Nat PMID: 23168691 CO

Jakkani, R. K., Sureka, J., Shyam, S. and Mani, S.

MRI findings in Fukuyama congenital muscular dystrophy: A rare case reportActa Neurologica Belgica; 2012, 112 (4): 401-403

Address: Department of Radiology, Christian Medical College and Hospital, Vellore, Tamilnadu, India

Intl PMID:22553003 CO

Jayaprakash, R. R., Rajkumar, A. P., Nandyal, M., Kurian, S. and Jacob, K. S.

Dissociative stupor, mutism and amnesia in a young manIndian Journal of Psychiatry; 2012, 54 (2): 198-199

Address: Department of Psychiatry, Christian Medical College, Vellore, Tamil Nadu, IndiaCenter for Psychiatric Research, Aarhus University Hospital, Risskov-8240, Denmark

Intl PMID:22988333 CO

John, A. M., Prakash, J. A., Simon, E. G. and Thomas, N.

Edwardsiella tarda sepsis with multiple liver abscesses in a patient with Cushing2 s syndromeIndian Journal of Medical Microbiology; 2012, 30 (3): 352-354

Edwardsiella tarda is very seldom a cause for gastroenteritis in humans. This organism can also cause extraintestinal infections, such as soft tissue infections, meningitis, peritonitis,osteomyelitis, endocarditis and hepatobiliary tract disease, particularly in the setting ofcompromised immunity. We describe, for the first time a case of E. tarda sepsis with multiple liver abscesses associated with Cushing2 s syndrome as a result of recreational aquatic exposure.

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Nat PMID:22885207 CO

John, A. M., Vasanthi, N., Khurana, A., Chacko, G., Mohanraj, P., Rajshekhar, V. andThomas, N.

An unusual cause for rings in the brainHong Kong Medical Journal; 2012, 18 (4): 346-347 We report the case of a 35-year-old man from North India who presented with generalised tonic-clonic seizures and was found to have ring-enhancing brain lesions. He had a coincident adrenal mass lesion. Cultures from both regions grew Histoplasma capsulatum. He improved on treatment with itraconazole. This case is being reported since cerebral ring- enhancing lesions are rarely associated with histoplasmosis, and coincident adrenal involvement is also a rarity in an immunocompetent individual.

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Intl PMID:22865183 CO

Jose, J., Kumar, V. and Joseph, G.

Transjugular balloon mitral valvotomy in a patient with inferior vena-caval interruptionJACC: Cardiovascular Interventions; 2012, 5 (2): 243-244

Address: Department of Cardiology, Christian Medical College Hospital, Vellore, Officer'sLane, Vellore-632004, Tamil Nadu, India

Intl PMID:22361611 CO

Jose, R., Chacko, B., Iyyadurai, R. and Peter, J. V.

Polythene predicamentJournal of Emergency Medicine; 2012, 43 (1): e31-e33

Background: Hypoxemia complicating care during ventilation is a common problem. Objective: To describe an unusual cause of hypoxemia with fluctuating airway pressures in an invasively ventilated, organophosphate-poisoned patient. Case Report: A 40-year-old man being treated for organophosphate poisoning developed episodes of high airway pressure during mechanical ventilation. These episodes initially settled spontaneously. Detailed evaluation failed to reveal any patient-, airway-, or ventilator-related cause for thehigh airway pressures. On the fourth hospital day, one such episode of high peak airway pressures persisted and was associated with low tidal volumes and oxygen desaturation. Several attempts at suctioning were unsuccessful and the suction catheter could not be advanced. When the endotracheal tube was removed, a piece of polythene was found at the lower end of the endotracheal tube. This polythene probably resulted in this unusualproblem by behaving like a flap valve, causing fluctuating airway pressures initially, and high airway pressures subsequently. There were no further episodes of high airway pressure, and a bronchoscopy did not reveal any residual pieces of polythene. Onsubsequent questioning, it was revealed that the patient was discovered unconscious with astuffed polythene cover containing the poison in his mouth. It was likely that the polythene was aspirated when the patient was drowsy, or it was pushed into the airway during intubation. Conclusion: The importance of careful visualization of the oral cavity before intubation is illustrated in this report. A bronchoscopy may aid in the evaluation of intermittent high airway pressures once pneumothorax and bronchospasm are excluded and should be considered early if an obvious cause for the high airway pressure is not evident.© 2012 Elsevier Inc.

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Intl PMID:19765939 CO

Kabeerdoss, J., Shobana Devi, R., Regina Mary, R. and Ramakrishna, B. S.

Faecal microbiota composition in vegetarians: Comparison with omnivores in a cohort of young women in southern IndiaBritish Journal of Nutrition; 2012, 108 (6): 953-957

The effect of vegetarian diets on faecal microbiota has been explored largely through culture-based techniques. The present study compared the faecal microbiota of vegetarianand omnivorous young women in southern India. Faecal samples were obtained from thirty-two lacto-vegetarian and twenty-four omnivorous young adult women from a similar social and economic background. Macronutrient intake and anthropometric data were collected. Faecal microbiota of interest was quantified by real-time PCR with SYBR Green using primers targeting 16S rRNA genes of groups, including: Clostridium coccoides group (Clostridium cluster XIVa), Roseburia spp.-Eubacterium rectale, Bacteroides-Prevotella group, Bifidobacterium genus, Lactobacillus group, Clostridium leptum group (Clostridium cluster IV), Faecalibacterium prausnitzii, Ruminococcus productus-C. coccoides, Butyrivibrio, Enterococcus species and Enterobacteriaceae. The groups were matched for age, socio-economic score and anthropometric indices. Intake of energy, complex carbohydrates and Ca were significantly higher in the omnivorous group. The faecal microbiota of the omnivorous group was enriched with Clostridium cluster XIVa bacteria, specifically Roseburia-E. rectale. The relative proportions of other microbial communities were similar in both groups. The butyryl-CoA CoA-transferase gene, associated with microbial butyrate production, was present in greater amounts in the faeces of omnivores,and the levels were highly correlated with Clostridium cluster XIVa and Roseburia-E. rectale abundance and to a lesser extent with Clostridium leptum and F. prausnitzii abundance and with crude fibre intake. Omnivores had an

increased relative abundance of Clostridiumcluster XIVa bacteria and butyryl-CoA CoA-transferase gene compared with vegetarians,but we were unable to identify the components of the diet responsible for this difference. ©2011 The Authors.

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Intl PMID:22182464 CO

Kapoor, N., Pai, R., Ebenazer, A., Sen, I., Stephen, E., Agarwal, S., Paul, M. J. and Rajaratnam, S.

Familial carotid body tumors in patients with sdhd mutations: A case seriesEndocrine Practice; 2012, 18 (5): e106-e110

Objective: To describe a family with hereditary paraganglioma due to a disease-causing mutation in the SDHD gene.Methods: We present the clinical findings, diagnostic test results, treatment, and genetic test results in a family with hereditary paraganglioma.Results: Three siblings with bilateral carotid body tumors presented at different time points and with varied clinical presentations. While the proband, a 20-year- old man, was not hypertensive and had normal urinary metanephrine and normetanephrine levels, his sister and brother had a more severe clinical picture, with hypertension in both and elevated normetanephrine levels in his brother (his brother had pheochromocytomaand 2 intra-abdominal paragangliomas). Mean age at presentation was 24 years. A 4-base pair frameshift mutation, c.337-340delGACT, was detected in exon 4 of the SDHD gene in all 3 patients.Conclusion: This is the first report of the c.337-340delGACT mutation beingassociated with hereditary paraganglioma; this report emphasizes the need to screen all at-risk first-degree relatives for the disease-causing SDHD mutation once it has been identified in an affected family member. Copyright © 2012 AACE.

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Intl PMID:22441002 CO

Khoury, H. J., Kukreja, M., Goldman, J. M., Wang, T., Halter, J., Arora, M., Gupta, V., Rizzieri, D. A., George, B., Keating, A., Gale, R. P., Marks, D. I., Mccarthy, P. L., Woolfrey,A., Szer, J., Giralt, S. A., Maziarz, R. T., Cortes, J., Horowitz, M. M. and Lee, S. J.

Prognostic factors for outcomes in allogeneic transplantation for CML in the imatinib era: A CIBMTR analysisBone Marrow Transplantation; 2012, 47 (6): 810-816

Allogeneic hematopoietic SCT is an effective treatment in accelerated (AP) or blast phase(BP) CML. Imatinib (IM) has transient but significant activity in advanced phases of CML, which may permit early allografting for responding patients. To identify prognostic factors in allograft recipients previously treated with IM, we analyzed 449 allogeneic hematopoietic SCTs performed from 1999 to 2004 in advanced-phase CML, using the data reported to the Center for International Blood and Marrow Transplant Research. CML patients in second chronic phase (CP2, n=184), AP (n=185) and BP (n=80) received HLA-identical sibling (27%), related (3%), or matched or mismatched unrelated donor (70%), peripheral blood (47%) or BM (53%) hematopoietic SCT after myeloablative (78%) or non-myeloablative (22%) conditioning. In all, 52% in CP2, 49% in AP and 46% in BP received IM before hematopoietic SCT. Disease-free survival was 35-40% for CP2, 26-27% for AP and 8-11% for BP. Cumulative incidence of acute and chronic GVHD and TRM were not affected by the stages of CML or pre-hematopoietic SCT IM exposure. Multivariate analyses showed that conventional prognostic indicators remain the strongest determinants of transplant outcomes. In conclusion, there are no new prognostic indicators of the outcomes of allogeneic hematopoietic SCT for advanced-phase CML in the IM era. © 2012 Macmillan Publishers Limited All rights reserved.

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Intl PMID:22986636 CO

Korula, P. J., Thomas, S. G., Sen, N. and Chacko, A. G.
Transient cortical blindness following a Hangman's fracture: A case report and review of literatureBritish Journal of Neurosurgery; 2012, 26 (2): 272-274

We describe a case with transient cortical blindness after trauma with no obvious structural damage to the vertebral artery in the presence of a C2 spondylolisthesis. A patient complaining of blindness in a setting of polytrauma should always alert the possibility of a cervical spine injury with vertebral artery ischaemia. © 2012 The Neurosurgical Foundation.

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Intl PMID:22026474 CO

Kota, A. A., Mittal, R. and Nayak, S.
Castleman's disease: A rare presacral tumourColorectal Disease; 2012, 14 (3): e129-e130

Address: Department of Surgery Unit 2 (Colorectal Surgery), Christian Medical College andHospital, Vellore 632004, TN, India

Intl PMID:21848666 CO

Krishnamoorthy, G., Ray, G., Agarwal, I. and Kumar, S.
Unusual presentation of sarcoidosis in a childRheumatol Int. 2012 May;32(5):1453-5. doi: 10.1007/s00296-011-1909-8.

Epub 2011 Apr 2.Sarcoidosis is a chronic multisystemic granulomatous disease of unknown etiology. We report a 5-yearold boy with sarcoidosis who had an unusual presentation of membranous nephropathy and Budd-Chiari syndrome. These combinations of features have never reported in pediatric literature so far. © 2011 Springer-Verlag.

Address: Christian Medical College, Vellore, India

Intl PMID:21461714 CO

Krishnamoorthy, V. P., Jacob, K. M. and Poonnoose, P. M.
Giant cell tumor of the supraspinatus tendon sheath causing shoulder impingement International Journal of Shoulder Surgery; 2012, 6 (1): 23-24

Address: Department of Orthopaedics, Christian Medical College, Vellore, Tamil Nadu - 632004, India

Intl PMID:22518077 CO

Kunwar, B. K., Hooda, A. and Joseph, G.
Recent trends in reperfusion in ST elevation myocardial infarction in a South Indian tier-3 city Indian Heart Journal; 2012, 64 (4): 368-373

Aims: In India, larger proportions of patients with ACS present with STEMI. We sought to study the recent trends of reperfusion in patients of acute STEMI. Methods and Results:1905 patients presenting with acute STEMI enrolled. 1636 (86%) received some form of reperfusion therapy. Streptokinase, 1235 (65%) patients, was the most common mode of reperfusion therapy used followed by primary PCI (205, 10. 7%) and ten- ecteplase (196,10%). 269 (14%) did not receive any form of reperfusion therapy, the most commonreason being late presentation in 230 (85. 7%). Patients presenting with STEMI increased from 297 to 446 comparing first and last half-year of study period. The PCI andtenecteplase numbers increased from 19 to 68 and 27 to 97 respectively. Conclusion: There was 20% increase in STEMI every year. Younger patients are least likely to receive primaryPCI or tenecteplase. 1 in 8 patients of STEMI did not receive any form of reperfusion therapy. © 2012, Cardiological Society of India. All rights reserved.

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Nat PMID:22929819 CO

Kuppuswamy, B., Joselyn, A. S., Chakravarthy, K. and Davis, K. I.

Mishap averted with an axillary stethoscopeSouthern African Journal of Anaesthesia and Analgesia; 2012, 18 (4): 184

Address: Department of Anaesthesia, Christian Medical College, Vellore, India

Intl CO

Lakshminarayan, R. and Anuradha, C.

Haemobilia - a rare presentation of intrabiliary hydatid diseaseJournal of Medical Imaging and Radiation Oncology; 2012, 56 (6): 650-653

Intrabiliary hydatid cysts have been known to cause complications. We report a rare case of calcified crumpled intrabiliary hydatid cyst causing massive haemobilia due to a hepaticartery pseudoaneurysm, an unusual complication of intrabiliary hydatid cyst. The patientwas successfully treated by stenting of the pseudoaneurysm with overlapping stents. ©2012 The Authors. Journal of Medical Imaging and Radiation Oncology.

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Intl PMID:23210585 CO

Lamba, S., Gupta, A. K., Shetty, R. and Kumar, N.

Antiretroviral prophylaxis and the risk of cleft lip and palate: Preliminary signal detection in the food and drug administration's adverse events reporting system databaseCleft Palate-Craniofacial Journal; 2012, 49 (1): 123

Address: Department of Plastic Surgery, Christian Medical College, Vellore, Tamil Nadu, India

Intl PMID:21801095 CO

Madhuri, V., Balakumar, B., Walter, N. M., Prakash, H., Dutt, V. and Chowdhurie, L.

Function after Total Calcanectomy for Malignant Tumor in a Child: Is Complex Reconstruction Necessary? Journal of Foot and Ankle Surgery; 2012, 51 (1): 71-75

Complex reconstruction after calcaneal excision for aggressive or malignant tumors hasbeen advocated. In this report we describe a 7-year-old child who underwent chemotherapy followed by total calcanectomy for a primitive neuroectodermal tumor of the calcaneum.The near-normal function achieved after the operation leads us to believe that complex reconstruction after calcaneal excision is not warranted in every pediatric case. This reportalso highlights the benefits of the Cincinnati incision for calcanectomy, and describes thegait abnormalities after the operation. To the best of our knowledge, a description of the gait abnormality observed after calcanectomy for tumor resection in a pediatric patient has not been reported up to now. © 2012 American College of Foot and Ankle Surgeons.

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Intl PMID:22083067 CO

Madhuri, V., Gangadharan, S. and Gibikote, S.

Bipolar physeal injuries of the clavicle in a childIndian Journal of Orthopaedics; 2012, 46 (5): 593-595

This article reports a type II Salter and Harris injury at either ends of the clavicle in a 13- year-old child with postero-inferior displacement at the lateral and antero-superiordisplacement at the medial end of the clavicle shaft. He was treated in a shoulderimmobilizer. The mechanism of injury is postulated as pivoting of the clavicle on the first rib with shearing at either ends leading to a bipolar injury. The brachial plexus and subclavian vessels are at a risk of damage at the pivot as they lie in close vicinity to the first rib. In view of the intact periosteal sleeve as well as joint articulation at both ends, the fracture healed with no functional loss.

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Nat PMID:23162157 CO

Mammen, S., Keshava, S. N., Danda, S., Raju, R. and Chacko, A. G.

Endovascular management of carotid-cavernous fistula in Ehlers-Danlos syndrome Type IV Neurology India; 2012, 60 (1): 119-121

Address: Department of Radiology, Christian Medical College, Vellore, Tamil Nadu, IndiaDepartment of Medical Genetics, Christian Medical College, Vellore, Tamil Nadu, IndiaDepartment of Ophthalmology, Christian Medical College, Vellore, Tamil Nadu, IndiaDepartment of Neurosurgery, Christian Medical College, Vellore, Tamil Nadu, India

Nat PMID:22406803 CO

Manipadam, J. M., Manipadam, M. T., Stephen, E. and Shah, G. J.

T cell lymphoma-presentation as cecal gangreneIndian Journal of Gastroenterology; 2012, 31 (4): 208-209

Address: Department of Vascular Surgery, Christian Medical College, Vellore 632 004 TamilNadu, IndiaDepartment of Pathology, Christian Medical College, Vellore 632 004 Tamil Nadu, India

Nat PMID:22923277 CO

Mathew, B. S., Fleming, D. H., Thomas, M., Prabha, R. and Saravanakumar, K.

An initial experience with therapeutic drug monitoring of levetiracetam as reported from a pediatric clinical setting in IndiaNeurology India; 2012, 60 (2): 146-149

Background and Objectives: Monitoring of levetiracetam in routine clinical practice is not strongly recommended. The aim of this study was to investigate any difference in serum levetiracetam concentration between patients on enzyme-inducing and -inhibiting antiepileptic co-medication and also to identify any correlation between levetiracetam concentration and clinical response. Materials and Methods: This study included pediatric patients with epilepsy from a tertiary care referral hospital in India. Details of antiepileptic co-medication, seizure frequency before and after initiating levetiracetam were recorded. Serum trough levetiracetam concentration was measured. Results: Of the 69 children recruited in the study, 55 children had >50% reduction in seizure frequency compared to baseline seizure frequency. Eight patients showed no improvement. The serumconcentration of levetiracetam was more than 10 µg/ml in 78.2% of responders and 75%non-responders. There was no difference in dosing between responders and non-responders. Patients on enzyme-inducing co-medication had lower median serum levetiracetam concentrations (7.3 µg/ml) compared to those on enzyme-inhibiting co- medication (14.4 µg/ml) or those without interfering antiepileptic co-medication (16.6µg/ml). Conclusion: Levetiracetam monitoring has a role in patients on antiepileptic polypharmacy and for confirmation of compliance.

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Nat PMID:22626693 CO

Mathews, S. S., Albert, R. R. and Job, A.

Audio-vestibular function in human immunodeficiency virus infected patients in IndiaIndian Journal of Sexually Transmitted Diseases; 2012, 33 (2): 98-101

Objective: As the acquired immunodeficiency syndrome (AIDS) epidemic shows no signs of abating, the impact of AIDS is felt more in the developing countries due to socioeconomicreasons. The possibility of drug-induced ototoxicity also adds to the risk of audio vestibulardysfunction. We sought to determine if there was a difference between the audio-vestibular function in the asymptomatic human immunodeficiency virus (HIV) infected patients and patients with AIDS. Study Design: A prospective, cross-sectional study Setting: A tertiary care center in South India Materials and Methods: The audio-vestibular system of 30 asymptomatic HIV positive subjects (group 1) and 30 subjects with AIDS (group 2), and age-matched 30 healthy controls (group 3) were assessed using pure tone audiometry andcold caloric test. Results: Sixteen patients each, in group 1 and group 2 and four subjects in the control group were detected to have a hearing loss indicating significantly more HIVinfected individuals (group 1 and 2) were having hearing loss (P=0.001). Kobrak's(modified) test showed 27% of patients in group 1 and 33% of patients in group 2 and none in the group 3 had a hypofunctioning labyrinth (P=0.001). Conclusion: It seems that the human immunodeficiency virus does

affect the audio-vestibular pathway. There was a significant incidence of audio-vestibular dysfunction among the HIV infected patients, as compared to the control population (P=0.001) and no significant difference between the asymptomatic HIV seropositive patients and AIDS patients. Majority of the patients had no otological symptoms.

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Nat PMID:23188933 CO

Merlin, T. J., Rajkumar, A. P., Reema, S., Tsheringla, S., Velvizhi, S. and Jacob, K. S.

Construct validity and factor structure of Tamil version of Beck Cognitive Insight Scale toassess cognitive insight of patients with schizophrenia Acta Neuropsychiatrica; 2012, 24 (1): 43-49

Objective: The ability to reflect rationally on one's own anomalous experiences and to recognise that their conclusions are incorrect is called as cognitive insight. It influences the delusion proneness of patients with schizophrenia. Structured instruments to assess cognitive insight have not been validated in any Indian languages so far. Hence, we aimed to evaluate the validity and factor structure of Tamil version of Beck Cognitive Insight Scale (BCIS-T). Methods: One hundred and fifty consecutive patients with schizophrenia completed BCIS-T. We assessed their clinical insight with the reference standard, Schedule for Assessment of Insight-Expanded version (SAI-E). An independent psychiatrist evaluated their psychopathology using Brief Psychiatric Rating Scale (BPRS). Results: BCIS-T was internally consistent with Cronbach's á 0.67 and Guttman's split-half coefficient as 0.63.BCIS-T composite index documented convergent validity with SAI-E total score (ñ = 0.38; p< 0.001) and discriminant validity with BPRS (ñ = -0.02; p = 0.85). Factor analysis showed a four-factor structure, namely self-certainty, self-reflectiveness, openness to external feedback and infallibility of self-reflection. BCIS-T composite index had significant linear relationship with clinical insight and treatment compliance on multivariate analyses (p <0.01). Conclusion: Our findings support the validity of BCIS-T to assess cognitive insight of the patients with schizophrenia. We suggest addressing the intricacies of cognitive insight beyond the traditional two-dimensional models in cross-cultural settings. © 2011 John Wiley & Sons A/S.

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Intl CO

Mittal, R., Stephen, E., Keshava, S. N., Moses, V. and Agarwal, S.

Percutaneous Cyanoacrylate Glue Embolization for Peripheral Pseudoaneurysms: AnAlternative TreatmentIndian Journal of Surgery; 2012, 74 (6): 483-485

Post-traumatic pseudoaneurysms are rare in the peripheral arteries and usually occur as a late sequel of trauma. Surgery has traditionally been considered as the gold standard oftherapy for traumatic peripheral pseudoaneurysms. We report 2 cases of post traumaticpseudoaneurysms successfully treated by percutaneous cyanoacrylate glue (N-Butyl 2 cyanoacrylate) embolization. This method offers complete exclusion of the pseudoaneurysm, at the same time avoiding the morbidity of open surgery. © 2012Association of Surgeons of India.

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Nat CO

Mohapatra, A., Basu, G., Sen, I., Asirvatham, R., Michael, J. S., Pulimood, A. B. and John, G. T.

Tuberculosis in a renal allograft recipient presenting with intussusceptionIndian Journal of Nephrology; 2012, 22 (1): 52-56

Extra-pulmonary tuberculosis (TB) is more common in renal allograft recipients and may present with dissemination or an atypical features. We report a renal allograft recipient withintestinal TB presenting 3 years after transplantation with persistent fever, weight loss,diarrhea, abdominal pain and mass in the abdomen with intestinal obstruction. He was diagnosed to be having an ileocolic intussusception which on resection showed a granulomatous inflammation with presence of acid-fast bacilli (AFB) typical of Mycobacterium tuberculosis. In addition, AFB was detected in the tracheal aspirate, indicating dissemination. He

received anti-TB therapy (ATT) from the fourth postoperative day. However, he developed a probable immune reconstitution inflammatory syndrome (IRIS) with multiorgan failure and died on 11 th postoperative day. This is the first report of intestinal TB presenting as intussusception in a renal allograft recipient. The development of IRIS after starting ATT is rare in renal allograft recipients. This report highlights the needfor a high index of suspicion for diagnosing TB early among renal transplant recipients and the therapeutic dilemma with overwhelming infection and development of IRIS upon reduction of immunosuppression and starting ATT.

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Nat PMID:22279345 CO

Moses, V., Jerobin, J., Nair, A., Sathyendara, S., Balaji, V., George, I. A. and Peter, J. V.

Enterococcal bacteremia is associated with prolonged stay in the medical intensive care unitJournal of Global Infectious Diseases; 2012, 4 (1): 26-30

Background: Although enterococci are relatively common nosocomial pathogens in surgical intensive care units (ICUs), their significance in blood cultures from patients in the medical ICU is unclear. Materials and Methods: In this retrospective study spanning 2 years, the clinical and microbiological characteristics of enterococcal bacteremia among medical ICU patients were evaluated. Results: Of 1325 admissions, 35 with enterococcal bacteremia accounted for 14.8% of positive blood cultures. They were significantly older (P=0.03) and had various co-morbidities. Most had vascular (96.9%) and urinary (85.3%) catheters, and67.7% were mechanically ventilated. In addition to blood, enterococci were isolated from vascular catheters (8.6%) and other sites (20%), while no focus was identified in 77% of patients. Prior use of broad-spectrum antimicrobials was nearly universal. All isolates testedwere sensitive to vancomycin and linezolid. Resistance to ampicillin and gentamicin were44.7% and 52.6%, respectively. Compared with other medical ICU patients, patients with enterococcal bacteremia had a longer ICU stay (P<0.0001) and a trend toward higher ICU mortality (P=0.08). Conclusions: Enterococcal bacteremia is an important nosocomial infection in the medical ICU, with a predilection for older patients with multiple comorbidities. Its occurrence is associated with a significantly longer ICU stay and a trend to a higher mortality. The choice of antibiotics should be dictated by local susceptibility data.

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Nat PMID:22529624 CO

Nair, M. K. C., Pappachan, P., Balakrishnan, S., Leena, M. L., George, B. and Russe, P. S.

Menstrual irregularity and poly cystic ovarian syndrome among adolescent girls-a 2 yearfollow-up studyIndian Journal of Pediatrics; 2012, 79 (SUPPL. 1): S69-S73

Objective To study the clinical outcome after a gap of 2 years, among adolescent girls with confirmed menstrual irregularity and with or without ultrasound diagnosed polycystic ovaries. Methods 136 adolescent girls from a cohort of 301 girls between 15 and 17 years of age with confirmed menstrual irregularity, with or without ultrasound diagnosedpolycystic ovaries, were assessed in detail after a gap of 2 years. Present menstrual history and symptoms as well as signs of polycystic ovary syndrome (PCOS) were recorded, apartfrom ultrasound scanning of abdomen. PCOS was diagnosed using Rotterdam's consensuscriteria and a comparative analysis was done among cases with and without PCOS. Results In the phase-II study done after a gap of 2 years, there was a statistically significant lower percentage of irregularities in menses, acne and enlarged thyroid, but a statistically significant increase in hirsuitism as compared to Phase-I study. Of the 136 cases reported,36.0% cases were found to have PCOS and 63.9% cases were normal. Comparison of the two groups showed a statistically significant higher percentage difference in prevalence of irregular menses (59.9%), hirsuitism (56.3%), acne (17.8%), obesity (17.3%), polycystic ovaries on ultrasound

(47.8%) and clinical hyperandrogenism (56.1%) among those with PCOS as against those without PCOS. Conclusions The results of this study support screening for menstrual irregularity, obesity and signs of clinical hyperandrogenism for early diagnosis of PCOS in an effort to improve the reproductive health of adolescent girls.© Dr. K C Chaudhuri Foundation 2011.

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Nat PMID:21769526 CO

Nanda, G. B., Patnaik, S., Mallick, S. N. and Purohit, K. L.

Congenital non-chylous pleural effusionIndian Journal of Practical Pediatrics; 2012, 14 (4): 464-467

Isolated pleural effusion, so called primary pleural effusion is an entity without any documented etiology such as cardiac, inflammatory, iatrogenic or fetal hydrops. Chromosomal abnormality like Down syndrome may be associated with isolated pleural effusion. The content of the effusion is mostly chylous and non chylous isolated pleural effusion in neonate is very rare. We experienced one case of non chylous exudative isolated pleural effusion present from 34 weeks of gestation and continued to be present at delivery. No cause was attributed to this. Imaging diagnosis was done by plain chest radiography and subsequent ultrasonography. The baby required neonatal resuscitation at birth including intubation. The baby was well after diagnostic and therapeutic thoracocentesis.

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Nat CO

Natarajan, M. S., Prabhu, K., Chacko, G., Rajaratnam, S. and Chacko, A. G.

Endoscopic transsphenoidal excision of a GH-PRL-secreting pituitary macroadenoma in a patient with McCuneAlbright syndromeBritish Journal of Neurosurgery; 2012, 26 (1): 104-106

We describe an endoscopic transsphenoidal excision of a GH-PRL-secreting pituitary adenoma and remodeling of frontotemporal fibrous dysplasia in a patient withMcCuneAlbright syndrome. Sphenoid dysplasia rendered transsphenoidal surgerychallenging, but a study of the radiological anatomy and good surgical planning made this feasible. Medical therapy and radiation was required for persistent acromegaly after surgery. © 2012 The Neurosurgical Foundation.

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Intl PMID:21767126 CO

Nehru, G. A., Pai, R., Samuel, P., Chacko, A. G. and Chacko, G.

Status of O6 -methylguanine-DNA methyltransferase [MGMT] gene promoter methylation among patients with glioblastomas from IndiaNeurology India; 2012, 60 (5): 481-486

Background: O6 -methylguanine DNA methyltrans ferase [MGMT] gene promoter methylation has emerged as a promising marker in determining resistance totemozolomide, used in the treatment of patients with glioblastomas.

Aim: To determine thefrequency of MGMT promoter methylation among patients with glioblastomas using methylation-specific polymerase chain reaction (MSP) and compare it to the results obtained by bisulfite sequencing of a subset of samples. Materials and Methods: DNA obtained from the frozen tissue of 27 samples of glioblastomas and three other gliomas, were analyzed for MGMT promoter methylation using a nested MSP assay. Sixteen samples were also subjected to bisulfite sequencing to determine the methylation status of 27 CpG sites within the sequenced region of the MGMT promoter. Data with respect to radiation, chemotherapy and survival outcome was also collected. Results: MGMT promotermethylation was seen in 67% of the cases included in the study using frozen tissues by MSP analysis, while 62% were methylated among glioblastomas alone. There was a 100% concordance between the results obtained by MSP analysis and bisulfite sequencing. Clinicaloutcome was known

among 67% of cases and methylation was higher among thosepatients who had no recurrence, though it was not statistically significant [P=0.44]. Conclusion: The frequency of methylation seen in this study concurs with that reported earlier from the country. MSP was easy to perform and interpret. However, the utility of this testing system in a routine diagnostic setting is still being debated.

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Nat PMID:23135024 CO

Padhan, P., Moses, V. and Danda, D.

Superior mesenteric artery syndrome in an adult rheumatoid arthritis patientInternational Journal of Rheumatic Diseases; 2012, 15 (1): e4-e5

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Intl PMID:22324964 CO

Parihar, M., Kumar, J. A., Sitaram, U., Balasubramanian, P., Abraham, A., Viswabandya, A., George, B., Mathews, V., Srivastava, A. and Srivastava, V. M.

Cytogenetic analysis of acute myeloid leukemia with t(8;21) from a tertiary care center inIndia with correlation between clinicopathologic characteristics and molecular analysisLeukemia and Lymphoma; 2012, 53 (1): 103-109

The t(8;21)(q22;q22) is the most common translocation in acute myeloid leukemia (AML). We describe the clinicopathologic and cytogenetic profile of 117 patients with t(8;21) AML. There were 76 males and 88 adults. The median age was 26 years. Most patients (80%) had AML M2. Dysplasia was present in 68% of patients and eosinophilia in 18%. Eight patients had fewer than 20% blasts. Additional chromosomal aberrations were seen in 103 patients (88%) with loss of a sex chromosome (LSC) in 78 patients (66%) and deletion 9qin 21 (18%). The other recurrent abnormalities were trisomies 4, 8 and 15, monosomy 17and deletion 7q (less than 5% each). Three- or four-way variant t(8;21) were seen in 6% of patients and 3% had tetraploidy. Aberrant expression of CD19 was seen in 54% of patients. FLT3 mutations were seen in 7.5% of patients (3/40) and c-KIT mutations in 6.6% (2/30). None had NPM1 or JAK2 V617F mutations. One patient had a granulocytic sarcoma. Complete remission was achieved in 96% of the 26 newly diagnosed patients after first induction. The median follow-up was 25 months (range 468). The overall survival was 69% at 31 months. © 2011 Informa UK, Ltd.

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Intl PMID:21745004 CO

Patil, A. K. B., Azad, Z. R., Mathew, V. and Alexander, M.

Chronic meningitis and central nervous system vasculopathy related to Epstein Barr virusAnnals of Indian Academy of Neurology; 2012, 15 (4): 303-306

Chronic active Epstein Barr virus (EBV) infection causes a wide spectrum of manifestation, due to meningeal, parenchymal and vascular involvement. An 11-year-old boy presented with chronic headache, fever and seizures of 18 months duration. His magnetic resonance imaging Brain showed fusiform aneurysmal dilatations of arteries of both the anterior and posterior cerebral circulation. Cerebrospinal fluid (CSF) showed persistent lymphocytic pleocytosis, raised proteins and low sugar with positive polymerase chain reaction for EBV. He later developed pancytopenia due to bone marrow aplasia, with secondary infection and expired. From clinical, imaging and CSF findings, he had chronic lymphocytic meningitis with vasculopathy, which was isolated to the central nervous system. He later had marrow aplasia probably due to X-linked lymphoproliferative disorder related to EBV infection. Vasculopathy, especially diffuse fusiform aneurysmal dilatation associated with chronic EBV infection, is rare, but has been described, similar to our case report.

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Intl PMID:23349599 CO

Patkar, N., Alex, A. A., Bargavi, B., Ahmed, R., Abraham, A., George, B., Vishwabandya, A., Srivastava, A. and Mathews, V.

Standardizing minimal residual disease by flow cytometry for precursor B lineage acute lymphoblastic leukemia in a developing countryCytometry Part B - Clinical Cytometry; 2012, 82 B (4): 252-258

Background: In addition to standard risk criteria at diagnosis, minimal residual disease (MRD) following initiation of therapy is a well-recognized risk factor to predict relapse. Literature from developing countries addressing therapeutic or laboratory practices relatedto MRD, is largely lacking. In a first paper from India, we describe our experience inestablishing a flow cytometry-based MRD assay for precursor B lineage ALL (BCP-ALL) with emphasis on the assay standardization and cost. Methods: Normal templates for B cell development were established in 10 control patients using CD45, CD11a, CD38, CD20, CD10, CD19, CD58, CD34, CD123, and CD22. BCP-ALL samples (n = 42) werecharacterized at diagnosis to identify a suitable marker for follow-up during mid (D+21) and end of induction (D+33). Both, multiparametric immunophenotyping and single marker detection of LAIP were used for data analysis. Results: In 95.2% of BCP-ALL at least two informative markers could be obtained when a minimum of four cocktail combinations were used. The combination CD20, CD10, CD45, and CD19 was the most useful (71.4%)followed by combinations containing CD38 (66.7%), CD22 (57.1%), CD11a (52.4%), andCD58 (33.3%). Using our approach, 60 and 47% of patients had detectable MRD at midand end induction time points, respectively. Conclusion: We have described a relatively cost effective MRD panel which is applicable to over 90% of patients. We hope that this data would encourage more centers in India and other resource constrained health delivery systems to develop MRD assays. Copyright © 2012 International Clinical CytometrySociety.

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Intl PMID:22467604 CO

Patkar, N., Nair, S., Alex, A. A., Parihar, M., Manipadam, M. T., Arora, N., Ahmed, R., Abraham, A., George, B., Viswabandya, A., Srivastava, V., Srivastava, A. and Mathews, V.

Clinicopathological features of hepatosplenic T cell lymphoma: A single centre experiencefrom IndiaLeukemia and Lymphoma; 2012, 53 (4): 609-615

In a first series from India, we report 9 cases of hepatosplenic T cell lymphoma (HSTCL)seen in 23 months accounting for 4.2% of all mature T-non-Hodgkin lymphomas (NHLs) in our institution. All patients presented with organomegaly, cytopenias and had evidence of bone marrow involvement. The tumor cells had a blastic (55%) morphology with predominantly intrasinusoidal (33.3%) or intrasinusoidal with an additional interstitial component (33.3%). On flow cytometry, the classical phenotype (CD3+, CD7+, CD4-, CD8-, CD5-, CD56+/-) was seen only in 4 patients. Unusual variations included CD45 (overexpression), CD7 (dim expression), CD3 (overexpression, heterogeneous and dim), CD2 (overexpression), CD5 (heterogeneous), CD8 (heterogeneous or dim or overexpression) and aberrant expression of CD19. Fluoresvent in situ hybridisation (FISH) and karyotyping was abnormal in 5 out of 7 patients evaluated. All of the 5 cases showed abnormalities in chromosome 7 (ring chromosome or isochromosome 7q). Five patients died of disease and related complications in a span of 13 months after diagnosis whereas 4 were alive at their last follow up out of which 2 had documented a relapse. In our series, HSTCL was characterized by typical clinical and variable immunophenotypic features and a dismal clinical outcome. © 2012 Informa UK, Ltd.

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Intl PMID:21916832 CO

Peterson, R. R., Agarwal, I. and Gibikote, S.

Spinal tuberculosis in an infant associated with maternal urinary tuberculosisIndian Journal of Tuberculosis; 2012, 59 (3): 168-170

A ten-month-old infant who presented with regression of milestones and seizures was noted to have a gibbus deformity in the upper thoracic region. She was

diagnosed to have spine and central nervous system tuberculosis by culture of pus from the paravertebral abcess which showed a growth of Mycobacterium tuberculosis. The mother, who had been having recurrent episodes of Urinary tract infection, was diagnosed to have Urinary TB proven by culture. Spinal tuberculosis, though rare, can be encountered in infancy and should be kept in mind while treating infants presenting with related symptoms.

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Nat PMID:23362715 CO

Philip, S. S., John, S. S., Simha, A. R., Jasper, S. and Braganza, A. D.

Ocular clinical profile of patients with pseudoexfoliation syndrome in a Tertiary Eye CareCenter in South IndiaMiddle East African Journal of Ophthalmology; 2012, 19 (2): 231-236

Purpose: To study the clinical profile of pseudoexfoliation (PEX) syndrome in a hospital setting. Materials and Methods: A case series of patients with PEX, with and withoutglaucoma attending the general ophthalmology clinic of a tertiary care center in SouthIndia. All patients underwent a complete ophthalmologic evaluation including recording diurnal variation of tension (DVT), gonioscopy and visual field assessment. Results: The study cohort comprised 529 patients (752 eyes). There were 296 (56%) females. The highest number of patients (261 patients) was from the age group between 60 and 69 years. Of 752 eyes, 57.8% eyes had unilateral PEX and 72% had established PEX. Gonioscopy showed open angles in 98.1% of eyes. Intraocular pressure (IOP) greater than21 mmHg in at least 1 of 4 measurements was recorded in 5.7% eyes. DVT was normal in96.4% of unilateral PEX eyes, similar to fellow non-PEX eyes. Pseudoexfoliation glaucoma occurred in 1.9% of eyes and 4.7% of eyes were glaucoma suspects. There was no correlation between the stage of PEX and increased IOP. Mean central corneal thickness of PEX eyes was 522 ± 27µ. Pupillary dilatation in 90.5% eyes with early PEX was e”7 mm. Conclusions: A small percentage of PEX eyes had raised IOP, and the number of eyes with glaucomatous optic neuropathy was even lower. PEX eyes did not demonstrate wide fluctuations in IOP. No correlation was found between raised IOP and stage of PEX. There was good pupillary dilatation in early stage PEX eyes suggesting that all PEX eyes may not have poor pupillary dilatation and related complications.

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Intl PMID:22623865 CO

Pradhan, Z. S., Jacob, P. and Korah, S.

Management of post-operative Nocardia endophthalmitisIndian Journal of Medical Microbiology; 2012, 30 (3): 359-361

Post-operative Nocardia endophthalmitis has an aggressive course and poor visual prognosis. It often masquerades as severe post-operative uveitis or toxic anterior segment syndrome due to the absence of vitreous involvement resulting in a delay in diagnosis. The poor prognosis in Nocardia endophthalmitis is due to severe intra-ocular inflammation which may lead to phthisis. Therefore, treatment with corticosteroids after appropriate antibiotics have been initiated may improve the outcome. This is an interventional case report highlighting the typical features of Nocardia endophthalmitis, which when diagnosed early and managed medically with antibiotics and steroids, resulted in an excellent visualoutcome in our patient.

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Nat PMID:22885210 CO

Pulimood, S. A., Rupali, P., Ajjampur, S. S. R., Thomas, M., Mehrotra, S. and Sundar, S.

Atypical mucocutaneous involvement with Leishmania donovaniNational Medical Journal of India; 2012, 25 (3): 148-150

Mucocutaneous leishmaniasis has rarely been reported from India. The usual causative organisms of this infection are Leishmania braziliensis and L. tropica. Another species, L.donovani, which usually causes visceral leishmaniasis, has recently been reported to causemucocutaneous disease in a few

patients from Sri Lanka. We report two patients who had undiagnosed chronic skin lesions for several years. Skin biopsies revealed Leishmania and the species was characterized as L. donovani in both patients. There was considerable improvement in the skin lesions following treatment with liposomal amphotericin B. © The National Medical Journal of India 2012.

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Nat PMID:22963292 CO

Rajaian, S. and Kekre, N. S.

Large bifid ureteric calculus in a patient with an ileal conduitUrology Annals; 2012, 4 (3): 178-180

Urinary diversion after extirpative surgery of the bladder is done by various methods. Conduit urinary diversion is the most commonly practiced method of urinary diversion. It is relatively easy to perform and has a lower complication rate than other forms of diversion,e.g., orthotopic neobladder and continent cutaneous urinary diversion. Urolithiasis is aknown and common complication of urinary diversion. Upper tract calculi in these cases often manifest symptomatically as occurs in the general population. Stones in the conduit can have a variable clinical presentation. Asymptomatic presentation is also noted in a few cases. We report a case of a large silent bifid ureteric calculus within an ileal conduit in a woman who had undergone urinary diversion 32 years earlier. Plain X-ray of the abdomen is the only investigation necessary to rule out urinary lithiasis in those who have had urinary diversion for a long time. This simple tool can diagnose the condition well in advance and aid in planning the management of this condition.

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Intl PMID:23248527 CO

Rajaian, S. and Kekre, N. S.

Giant hydronephrosis mimicking massive ascitesANZ Journal of Surgery; 2012, 82 (6): 468-469

Address: Department of Urology, Christian Medical College, Vellore, India

Intl PMID:22672398 CO

Rajaian, S. and Kekre, N. S.

Vesicovaginal fistula with large bladder calculusANZ Journal of Surgery; 2012, 82 (4): 278-279

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Intl PMID:22510189 CO

Rajaian, S. and Kekre, N. S.

Renal cell carcinoma in tuberous sclerosisANZ Journal of Surgery; 2012, 82 (3): 186-186

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Intl PMID:22510137 CO

Rajaian, S., Kumar, R. M. and Kekre, N. S.

Squamous cell carcinoma associated with large bladder calculusANZ Journal of Surgery; 2012, 82 (1-2): 92-93

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Intl PMID:22507514 CO

Rajkumar, A. P., Poonkuzhali, B., Kuruvilla, A., Srivastava, A., Jacob, M. and Jacob, K. S.

Outcome definitions and clinical predictors influence pharmacogenetic associations between HTR3A gene polymorphisms and response to clozapine in patients with schizophreniaPsychopharmacology; 2012, 224 (3): 441-449

Rationale Pharmacogenetics of schizophrenia has not yet delivered anticipated clinical dividends. Clinical heterogeneity of schizophrenia contributes to the poor replication of the findings of pharmacogenetic association studies. Functionally important HTR3A gene single- nucleotide polymorphisms (SNPs) were reported to be associated with response to clozapine. Objective The aim of this study was to investigate how the association between HTR3A gene SNP and

response to clozapine is influenced by various clinical predictors and by differing outcome definitions in patients with treatmentresistant schizophrenia (TRS). Methods We recruited 101 consecutive patients with TRS, on stable doses of clozapine, and evaluated their HTR3A gene SNP (rs1062613 and rs2276302), psychopathology, and serum clozapine levels. We assessed their sociodemographic and clinical profiles, premorbid adjustment, traumatic events, cognition, and disability using standard assessment schedules. We evaluated their response to clozapine, by employing six differing outcome definitions. We employed appropriate multivariate statistics to calculate allelic andgenotypic association, accounting for the effects of various clinical variables. Results T allele of rs1062613 and G allele of rs2276302 were significantly associated with good clinical response to clozapine (p=0.02). However, varying outcome definitions make these associations inconsistent. rs1062613 and rs2276302 could explain only 13.8 % variability in the responses to clozapine, while combined clinical predictors and HTR3A pharmacogenetic association model could explain 38 % variability. Conclusions We demonstrated that the results of pharmacogenetic studies in schizophrenia depend heavily on their outcome definitions and that combined clinical and pharmacogenetic models have better predictive values. Future pharmacogenetic studies should employ multiple outcome definitions and should evaluate associated clinical variables. © Springer-Verlag 2012.

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Intl PMID:22700043 CO

Rajshekhar, V.

Rate of recurrence following stereotactic aspiration of colloid cysts of the third ventricleStereotactic and Functional Neurosurgery; 2012, 90 (1): 37-44

Background: The rate of recurrence following stereotactic aspiration of colloid cysts is not defined in the literature. Aims: To study the long-term imaging and clinical outcome inpatients who had stereotactic aspiration of colloid cysts of the third ventricle. Methods: Between 1987 and 1994, computerized tomography-guided stereotactic aspiration wasattempted in 26 consecutive patients with colloid cysts of the third ventricle. Results: Therewas no mortality or permanent morbidity. A complete aspiration of the cyst was possible in17 patients, a partial aspiration of the cyst was achieved in 6 and the aspiration failed in 3 patients. On long-term follow-up, symptomatic recurrence was noted in 5/6 patients afterpartial aspiration and 4/17 patients after complete aspiration (mean follow-up 84.8months). Kaplan-Meier analysis revealed that after complete aspiration of the cyst, median time to recurrence on imaging is 42 months (95% CI 23.0-60.9 months) but median time to symptomatic recurrence is much later at 184 months (95% CI 88.2-279.7 months). Conclusions: Stereotactic aspiration of colloid cysts remains a valid surgical option as complete aspiration leads to a good long-term outcome in several patients. Partial aspiration of the cyst should be followed by excision of the cyst, due to the high rate of symptomatic recurrence. However, periodic follow-up imaging is mandatory even after complete aspiration as delayed recurrences are possible.

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Intl PMID:22236766 CO

Ramachandran, J., Ajjampur, S. S. R., Chandramohan, A. and Varghese, G. M.

Cases of human fascioliasis in India: Tip of the icebergJournal of Postgraduate Medicine; 2012, 58 (2): 150-152

This report presents two cases of human fascioliasis from different states in India. Although only few cases of human fascioliasis have been reported from India previously, both these cases were encountered within a span of three months at this tertiary care centre. Case 1 had significant symptoms with episodes of fever, abdominal pain and eosiniphilia and underwent multiple diagnostic procedures before the correct diagnosis was reached. Case 2, who had few symptoms, had fascioliasis diagnosed with minimal

evaluation. These different presentations seen at two ends of the clinical spectrum of disease along with findings of peripheral eosinophilia, and radiological findings led to a presumptive diagnosis that was then confirmed by microscopic examination of bile. Morphometric analysis of ova from these cases was suggestive of infestation with F. gigantica or a F. gigantica-like hybrid. Both patients were treated with triclabendazole which was imported from Geneva. The need tobe aware of the possibility of occurrence of this disease and the inclusion of drugs used for treating the disease, in the Indian drug list, should be emphasized.

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Nat PMID:22718061 CO

Rupa, V. and Thomas, M.

Different types of fungal sinusitis occurring concurrently: implications for therapy Eur Arch Otorhinolaryngol. 2013 Feb;270(2):603-8. doi: 10.1007/s00405-012-2096-2.

Epub 2012 Jul 6.The purpose of this study is to describe the clinical and histopathological features, management and outcome of a series of patients with simultaneous occurrence of invasiveand non-invasive fungal sinusitis (mixed fungal sinusitis). The histopathological records of patients with fungal sinusitis seen over the last 6 years were reviewed. The clinical,histopathological, treatment and follow up details of all cases with mixed fungal sinusitis were noted. Six cases of mixed fungal sinusitis with concurrent occurrence of chronicgranulomatous fungal sinusitis and allergic fungal sinusitis (AFS) were seen during the study period. Most (83.3 %) had bilateral disease. All patients had undergone priorendoscopic sinus surgery at least once within the previous 2 years. Histopathologicalfeatures showed predominance of invasive disease in half the patients. Except for one patient who did not report for follow up, all patients with predominant chronic granulomatous fungal sinusitis received systemic antifungal therapy and inhaled steroids. Those with predominant features of AFS received oral and inhaled steroids. Five patients with mixed fungal sinusitis who had follow up ranging from 6 months to 5 years were disease free following treatment. Mixed fungal sinusitis should be recognized by thesurgeon and pathologist as a separate category of fungal sinusitis whose treatment depends on accurate histological diagnosis. A good outcome may be expected with appropriate therapy.

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Intl PMID:22766834 CO

Russell, S., Subramanian, B., Russell, P. S. and Nair, M. K. C.

Psychopathology, traumatic life events, and coping skills among patients attending a primary-care adolescent clinicIndian Journal of Pediatrics; 2012, 79 (SUPPL. 1): S52-S59

Objective To compare the type of life events experienced and coping styles used by adolescents with and without psychopathology, attending a primary-care adolescent clinic. Methods One hundred adolescents with and without psychopathology attending a drop-inadolescent clinic in a tertiary-care teaching hospital were recruited. Faceto- face interviewused Child Behaviour Checklist, Life Event Scale, Coddington's life event scale, Impact ofEvent Scale and Modified Jalowiec coping scale as measures after getting written, informed consent from the primary care-giver and verbal assent from the adolescents. Bivariate and multivariate comparisons were done between the groups appropriately. Results Adolescentswith psychopathology had experienced more parental fights, increased arguments withparents, increased arguments between parents, serious illness requiring hospitalization of the adolescent. The intrusive symptoms of PTSD were noted more than avoidant symptoms among those adolescents with life events. Confrontative, emotive and optimistic coping styles were most often used in adolescent with psychopathology. Conclusions In India, adolescents with psychopathology attending a primary care clinic have significant life events and different coping styles. Therefore, adolescents with psychopathology in this setting should be screened for life events as well as dysfunctional coping styles and given appropriate intervention.

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Nat PMID:21630074 CO

Sajith, K. G., Dutta, A. K., Joseph, A. J., Simon, E. G. and Chacko, A.

Tombstone of surgical clip in common bile ductTropical gastroenterologyTrop Gastroenterol. 2012 Jan-Mar;33(1):67-9.: official journal of the Digestive Diseases Foundation; 2012, 33 (1): 67-69

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Intl PMID:22803300 CO

Sandhya, P. and Danda, D.

Paraneoplastic palmar fasciitis in carcinoma breastJournal of Clinical Rheumatology; 2012, 18 (2): 112

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Intl PMID:22367696 CO

Sandhya, P., Danda, D., Mathew, J., Kurian, S. and Ramakrishna, B. S.

Eosinophilic esophagitis and pharyngitis presenting as mass lesion in a patient with inactive rheumatoid arthritisJournal of Clinical Rheumatology; 2012, 18 (1): 33-35

ABSTRACT: We describe here a case of longstanding rheumatoid arthritis (RA) presenting with recurrent episodes of epigastric pain, melena, nonprogressive dysphagia, andhoarseness associated with persistent peripheral blood eosinophilia. Her RA was clinicallyinactive, but she had significant lymphadenopathy and hepatosplenomegaly. Computed tomographic scan of the thorax revealed circumferential wall thickening extending from the oropharynx to the gastroesophageal junction with a large polypoidal mass projecting into the lumen of the stomach. Histology revealed infiltration of the esophageal mucosa by eosinophils with a density of 40 to 80 per high-power field. The stratified squamous epithelium of the pharyngeal mucosa was also infiltrated by eosinophils with a density of more than 100 per high-power field. Eosinophilic esophagitis and pharyngitis were diagnosed, and the patient was administered corticosteroids and hydroxyurea, following which her symptoms resolved. On repeat imaging, there was significant reduction in esophageal wall thickening and luminal dilatation. There are few reports of tissue eosinophilia in association with RA, but the pathogenesis and any definite association with RA are not clear. Copyright © 2012 by Lippincott Williams & Wilkins.

Address: Department of Clinical Immunology and Rheumatology, Christian Medical College and Hospital, Vellore 632004, India

Department of General Pathology, Christian Medical College and Hospital, Vellore, India Department of Gastrointestinal Sciences, Christian Medical College and Hospital, Vellore, India soft tissues and along the vascular and nerve sheaths into the epidural space. This is theWrst ever reported case of epidural emphysema in connective tissue disease to the best of our knowledge. © 2011 Springer-Verlag.

Address: Department of Clinical Immunology and Rheumatology, Christian Medical College and Hospital, Vellore 632004, IndiaDepartment of Radiology, Christian Medical College, Vellore 632004, India

Intl PMID:22157269 CO

Sandhya, P., Keshava, S. N., Danda, D., Padhan, P., Mathew, J. and Gibikote, S.

Pneumorrhachis and pneumomediastinum in connective tissue disease-related interstitiallung disease: Case series from a tertiary care teaching hospital in South IndiaRheumatology International; 2012, 32 (5): 1415-1419

Pneumomediastinum has been described as a rare complication of connective tissue diseases. Here, we report four cases of pneumomediastinum: three of which are associatedwith dermatomyositis and one with mixed connective tissue disease. All our patients hadinterstitial lung disease. The Wrst case of dermatomyositis described below was complicated by epidural emphysema (pneumorrhachis) in addition to

pneumomediastinum. Pneumorrhachis is reported in many isolated case reports and series in the setting of asthma, pneumothorax, blunt chest trauma, etc. Less than 10% of pneumomediastinum cases develop this complication and vast majority of cases resolve spontaneously. The mechanism behind this has been postulated to be the passage of air through the intervertebral foramen. Others suggest entrapment of air which dissects between paraspinal soft tissues and along the vascular and nerve sheaths into the epidural space. This is theWrst ever reported case of epidural emphysema in connective tissue disease to the best of our knowledge. © 2011 Springer-Verlag.

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Intl PMID:21442175 CO

Sebastian, S., Suresh, B. A. and Ballraj, A.

Causes of acquired vocal cord palsy in Indian ScenarioOnline Journal of Health and Allied Sciences; 2012, 11 (3):

Vocal cord paresis or paralysis occurs due to lesion in the vagus nerve. Vocal cord paralysis can lead to dysphonia as well as dysphagia which lead the patient to frustration and emotional problems. The literature available on the etiology and the problems faced by them in Indian population is very scanty. Hence a prospective study was done on 41 Patients with vocal cord palsy who were referred to the Department of ENT for voice assessment and management from March 1st2012 till 1st August 2012. The medical and surgical reports were examined. They were evaluated by an otorhinolaryngologist, and a Speech Language Pathologist. Diagnosis was made based on video stroboscopic findings. We also examined voice-related quality of life(V-RQOL) outcomes in these patients. In this study, endo-tracheal intubation (15/41;36.5%) was the major cause of vocal cord palsy. The second major cause for vocal cord palsy in our study was surgical trauma (iatrogenic) which constituted 26.8% (11/41), out ofwhich thyroidectomy contributed to 81.81% (9/11) and cardiac surgery (Coronary ArteryBypass Grafting (CABG) contributed to 18.18% (2/11). Neurological problems caused14.63% (6/41) of the total cases. Non-surgical trauma constituted 9.75% (4/41) of the total patients. Left recurrent laryngeal nerve paralysis was found as a complication of heartdisease in 7.3%(3/41). Tuberculosis of lungs and cancer of lungs accounted to be the rarestcauses. Hoarseness of voice was the most common symptom with associated dysphagia in a few. The voice related quality of life of these patients was found to be poor. They were found to have problems in the social-emotional domain and physical functioning domain.

Address: Department of ENT, Christian Medical College, Vellore, Tamilnadu, IndiaNadlab, Statue, Trivandrum, Kerala, India

Intl CO

Selvakumar, P., Balraj, A., Kurien, R. and Krishnan, T.

Clinical and Audio Vestibular Profile of Meniere's Disease in a Tertiary Care Centre in IndiaIndian Journal of Otolaryngology and Head and Neck Surgery; 2012, 64 (4): 351-355

The aims of this study are to determine the frequency of patients presenting with Meniere's Disease(MD) in an Indian setting, using the American Academy of Otolaryngology-Head and Neck Surgery (AAO) diagnostic criteria, and to describe the clinical and audio vestibular profiles of these patients. The study was based on prospective case series design in the settings of a tertiary referral hospital. The study included all consecutive patients aged between 5 and 75 years presenting with the history of hearing loss, vertigo, tinnitus and or aural fullness as participants, satisfying inclusion and exclusion criteria for MD (AAO 1995) recruited over a 12 month period. Main outcome measures comprised the evaluation of epidemiological profile, clinical features, and results of audio vestibular investigations like Pure Tone Audiometry with and without glycerol, Impedance Audiometry, Electrocochleography (ECohG), Distortion Product Otoacoustic Emission and Electronystagmography (ENG). The results of the study are as follows: The frequency of MD was 15. 6%, being commoner in males than females (2. 6:1) and occurring more in the age group 40-49 years among males and 30-39 years among females. High frequency tinnitus was commoner than low frequency tinnitus. Extra tympanic ECohG had a positive predictive value of 76% for endolymphatic hydrops. ENG was useful for demonstrating canal paresis pattern of nystagmus in 61%. Indian patients

with MD commonly present to tertiary care at the functional level scale of 3. The results of this study revealed that the frequency of MD is not as low in the Indian ENT setting as earlier believed. There is a high chance of missing cases in the routine ENT outpatient clinic setting unless a structured proforma incorporating the AAO 1995 diagnostic criteria is used. © 2011 Association of Otolaryngologists of India.

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Nat CO

Sen, I., Raju, R. S., Vyas, F. L., Eapen, A. and Sitaram, V.

Benign biliary papillomatosis in a patient with a choledochal cyst presenting as haemobilia: A case reportAnnals of the Royal College of Surgeons of England; 2012, 94 (1): e20-e21

Biliary papillomatosis is a rare condition usually detected on imaging or postoperative histopathology. It may be asymptomatic or present with features of cholangitis. We report the management of a patient presenting with haemobilia.

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Intl PMID:22524914 CO

Shah, K., Mathew, V., Gallus, G. N., Dotti, M. T., Federico, A. and Danda, S.

Mutation analysis of cerebrotendinous xanthomatosis in an Indian caseNeurology India; 2012, 60 (6): 643-644

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Department of Neurology, Christian Medical College, Vellore, Tamil nadu, India Department of Neurological, Neurosurgical and Behavioural Sciences, University of Siena, Siena, Italy

Nat PMID:23287330 CO

Shyam, S., Sagar, A., Sureka, J. and Jakkani, R. K.

An unusual case of a giant aneurysm of an aberrant systemic artery supplying a pulmonary sequestrationEuropean Journal of Cardio-thoracic Surgery; 2012, 42 (3): 592

Address: Department of Radiology, Christian Medical College and Hospital, Vellore, India

Intl PMID:22696457 CO

Singh, B. E., Thomas, M. and George, R.

Pediatric onset keratosis lichenoides chronica: A case reportPediatric Dermatology; 2012, 29 (4): 511-512

Keratosis lichenoides chronica (KLC) is an acquired keratinization disorder that is rare in childhood. We report a case of sporadic pediatric-onset KLC with seborrheic dermatitis-likelesions on the forehead, papules in a retiform pattern in the axillae and mons pubis, andeye and oral mucosal involvement,with additional features of premature canities and a transient photosensitive eruption. © 2011 Wiley Periodicals, Inc.

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Intl PMID:22011337 CO

Singh, V., Turel, M. K., Chacko, G., Joseph, V. and Rajshekhar, V.

Supratentorial extra-axial anaplastic ependymoma mimicking a meningiomaNeurology India; 2012, 60 (1): 111-113

Address: Department of Neurological Sciences, Section of Neuropathology, ChristianMedical College, Vellore, IndiaDepartment of Neurosurgery, Christian Medical College, Vellore, India

Nat PMID:22406799 CO

Sowmyanarayanan, T. V., Ramani, S., Sarkar, R., Arumugam, R., Warier, J. P., Moses, P. D., Simon, A., Agarwal, I., Bose, A., Arora, R. and Kang, G.

Severity of rotavirus gastroenteritis in Indian children requiring hospitalizationVaccine; 2012, 30 (SUPPL. 1): A167-A172

Introduction: The burden of rotavirus gastroenteritis is greatest in India and other developing countries. With the availability of two licensed vaccines and a number of additional vaccines in various stages of development and trial, analysis of detailed clinical information is essential for the development of a uniform method of severity assessment. Methods: Diarrhoeal stool samples from 1001 children <5 years of age hospitalized with gastroenteritis were screened for rotavirus using a commercial enzyme immunoassay. Positive samples were confirmed by

genotyping using hemi nested multiplex RT-PCR. Detailed clinical data was collected for gastroenteritis assessment for 934 children and extraintestinal presentations were analyzed in 470 children. Severity scoring was carried out for all children using the Vesikari score and in a subset by Clark's scoring system. Results: Rotavirus was detected in 35.4% of samples tested between December 2005 andNovember 2008. Clark's and Vesikari scores showed moderate correlation but varied greatly in the categorization of severe disease. Using Clark's scoring, only 1.6% were categorizedas presenting with severe disease in comparison to 66.1% by the Vesikari score. Association of extraintestinal symptoms with rotavirus gastroenteritis was not documentedin this study. Conclusion: The assessment of disease severity using two common severity scoring systems highlights the difference in the categorization of "severe" disease. Thisunderscores the need for a robust scoring system which is needed for vaccine trial and in post-licensure surveillance, because vaccine efficacy is estimated for protection againstsevere rotavirus gastroenteritis. © 2011 Elsevier Ltd.

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Intl PMID:22520127 CO

Sridhar, F. K., Mukha, R. P., Kumar, S. and Kekre, N. S.

Lower urinary tract symptoms and prostatic calculi: A rare presentation of alkaptonuriaIndian Journal of Urology; 2012, 28 (2): 219-221

Alkaptonuria is a rare tyrosine metabolic disorder. A deficiency of homogentisic acid oxidase leads to accumulation of homogentisic acid in the body. Dark-colored urine, cutaneouspigmentations and musculoskeletal deformities are characteristic features. Storage andvoiding lower urinary tract symptoms due to prostatic calculi is a rare presentation.

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Nat PMID:22919147 CO

Sriinivasan, C. and Kuppuswamy, B.

Rhabdomyolysis complicating non-invasive blood pressure measurementIndian Journal of Anaesthesia; 2012, 56 (4): 428-430

Address: Department of Anaesthesia, Christian Medical College and Hospital, Vellore, 632004, India

Nat PMID:23087481 CO

Subhendu, M. S. K., George, O. K. and Jude Prakash, J. A.

Antistreptokinase antibodies and the response to thrombolysis with streptokinase in patients with acute ST elevation myocardial infarction Heart Asia; 2012, 4 (1): 7-10

Background and objective: A large number of patients with ST elevation myocardial infarction (STEMI) continue to receive streptokinase (SK) in the developing countries. High levels of antistreptokinase (ASK) antibodies can result in failure of thrombolysis. This study was conducted to assess the presence of ASK antibodies in the general population and its effect on the outcome of thrombolysis with SK. Design: Prospective observational study. Setting: A tertiary care medical institute in Vellore, India. Patients: 148 patients presenting with STEMI undergoing thrombolysis with SK were recruited. Main outcome measures: The response to SK was assessed by reperfusion markers in the patients and they were categorised as good responders, probable responders and non-responders. Those who responded to SK and probable responders were considered to have benefited from thrombolysis. Results: 60 patients (40%) had ASK antibody titres higher than the median. In patients with a window period <6 h, 73% of patients who benefited from thrombolysis had low ASK titres while 100% of the patients who did not benefit had high ASK titres (p=0.001). Similarly, in patients with a window period >6 h, 89% of patients who benefited from thrombolysis had low ASTK titres while 54% of those who did not benefit had high

Intl CO

Sureka, J., Gupta, A. and Eapen, A.

Pseudolesion in a patient with superior vena cava syndromeIndian Journal of Gastroenterology; 2012, 31 (6): 355-356

Address: Department of Radiology, Christian Medical College and Hospital, Vellore, 632004, IndiaChristian Medical College and Hospital, Vellore, 632 004, India

Nat PMID:23111641 CO

Sureka, J., Jakkani, R. K. and Panwar, S.

MRI findings in acute hyperammonemic encephalopathy resulting from decompensated chronic liver diseaseActa Neurologica Belgica; 2012, 112 (2): 221-223

Hyperammonemic encephalopathy is a type of metabolic encephalopathy with diversified etiology. Hyperammonemia is the end result of several metabolic disorders such as congenital deficiencies of urea cycle enzymes, hepatic encephalopathy, Reye's syndrome and other toxic encephalopathies. Non-specific clinical presentation poses a great challenge in early diagnosis of this entity. Irrespective of the underlying etiology, hyperammonemia causes a distinctive pattern of brain parenchymal injury. The cingulate gyrus and insular cortex are more vulnerable to this type of toxic insult. Characteristic magnetic resonanceimaging findings in combination with laboratory parameters can help to differentiate thisentity from other metabolic encephalopathy and thus aiding in early diagnosis and treatment. © 2012 Belgian Neurological Society.

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Intl PMID: 22426669 CO

Sureka, J., Panwar, S. and Mullapudi, I.

Intraneural ganglion cysts of obturator nerve causing obturator neuropathy Acta Neurologica Belgica; 2012, 112 (2): 229-230

Address: Department of Radiology, Christian Medical College and Hospital, Vellore, Tamilnadu, IndiaDepartment of Neurology, Christian Medical College, Vellore, Tamilnadu, India

Intl PMID:22426671 CO

Sureka, J., Reddy, D. V. and Karthik, A. K.

Dynamic 3 T MRI of temporomandibular joint in diagnosing a stuck diskJournal of Indian Society of Pedodontics and Preventive Dentistry; 2012, 30 (2): 158-160

Magnetic resonance imaging (MRI) is the imaging modality of choice in the evaluation of internal derangement of the temporomandibular joint (TMJ). Dynamic MRI including theopen and close mouth views in sagittal plane determine the exact position of articular diskand thus help to evaluate the joint for internal derangement. We also highlight the role of dynamic MRI of TMJ in diagnosis of stuck disk in a 17-year-old male who presented with symptoms of pain and difficulty in opening the mouth.

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Nat PMID: 22918102 CO

Thakar, S. and Rajshekhar, V.

Evaluation of pain as a preference-based health status measure in patients with cervical spondylotic myelopathy undergoing central corpectomy Acta Neurochirurgica; 2012, 154 (2): 335-340

Background: Assessment of pain in patients with cervical spondylotic myelopathy (CSM)before and after decompressive surgery has not been adequately addressed in the literature. The purpose of this study was to ascertain the intensity of various pain scores in patients with cervical spondylotic myelopathy (CSM) before and after surgery, and to assess their correlation with other outcome measures. Methods: In this prospective study, 51 patients with CSM were assessed preoperatively and 1 year or more after uninstrumented central corpectomy (CC) using the Visual Analogue Scale (VAS), Nurick grade, patient perceived outcome score (PPOS) and SF-36. Results: At presentation, there was a higher incidence of neck pain (43.1%) and arm pain (51%) than low axial pain (23.5%), with the mean VAS scores being 53.6 ± 27.4, 55.5 ± 27.4 and 34.0 ± 20.3, respectively. Following surgery, the mean neck, arm and low axial pain scores decreased significantly ($p < 0.05$) to 14.4 ± 22.6, 5.2 ± 11.8 and 16.0 ± 26.1, respectively. Improvement in pain scores demonstrated poor agreement (ê <0.2) with PPOS, Nurick grade recovery rate (NGRR), and the physical component summary (PCS) and mental component summary (MCS) of the SF-36. Pain scores did not influence quality of life as assessed by SF-36. Conclusions: Pain was reported by about half the patients with CSM, but was not severe in any of them. Following decompressive surgery, the intensity of all these pain components decreased significantly. Low

axial pain, a reflection of CSM-related spasticity perceived in the lumbosacral region, became prominent in many patients after surgery. © 2011 Springer-Verlag.

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Intl PMID:22109692 CO

Thomas, J. K., Abraham, D., Joseph, P. and Paul, M. J.

Lateral laparoscopic approach to pancreatic tail insulinomasWorld Journal of Endocrine Surgery; 2012, 4 (1): 3-7

Pancreatic endocrine tumors are relatively rare lesions and laparoscopic surgery is being increasingly used, especially for insulinomas because of their relatively small size and low incidence of malignancy. Laparoscopic approach to pancreatic tumors has been described in the supine position, transomentally via the lesser sac with anterior stomach retraction. We propose a simplified lateral laparoscopic approach to insulinomas localized preoperatively to the tail or distal body of pancreas. Four patients with pancreatic tail insulinomas underwent laparoscopic surgery between November 2006 and February 2008. Diagnosis was confirmed by fasting sugar, insulin and proinsulin assays. Lesions were localized by multiphasic CT scan/ MRI scan and endoscopic ultrasound. All these cases had definitely identifiable enhancing lesions in the distal body/tail in relation to the splenic hilum that appeared accessible by a lateral approach. Except for the first case which was done through the traditional supine approach, the other cases were done by the lateral approach. Thepatients were positioned right lateral with a kidney bridge. Four subcostal ports were placed and the left colon and spleen with pancreatic tail were mobilised in the same fashion as forsplenectomy or adrenalectomy. Tumors were easily identifiable corresponding to theimaging studies. Laparoscopic enucleation was successfully completed in all four patients with lesions in the tail of pancreas, one by the traditional approach and other three by the proposed lateral approach. One patient had associated splenectomy because of theproximity of the lesion to the splenic vessels. Two patients had minor pancreatic leakmanaged conservatively. The left lateral transperitoneal laparoscopic approach to insulinomas located in the tail of pancreas is feasible and safe. The procedure can be done with ease by surgeons who are familiar with adrenalectomy and splenectomy.

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Intl CO

Thomas, M., Sivadasan, A., Alexander, M. and Patil, A. K. B.

Subacute sclerosing panencephalitis with bilateral inferior collicular hyperintensity on magnetic resonance imaging brainAnnals of Indian Academy of Neurology; 2012, 15 (4): 329-331

Subacute sclerosing panencephalitis (SSPE) is chronic encephalitis occurring after infection with measles virus. An 8-year-old boy presented with progressive behavioral changes,cognitive decline and myoclonic jerks, progressing to a bed bound state over 2 months.Magnetic resonance imaging (MRI) brain showed T2-weighted hyperintensities in the subcortical areas of the left occipital lobe and brachium of the inferior colliculus on both sides. EEG showed bilateral, synchronous periodic discharges. Serum/cerebrospinal fluid measles IgG titer was significantly positive. The overall features were suggestive of SSPE. MRI finding of bilateral inferior colliculus changes on MRI without significant involvement of other commonly involved areas suggests an uncommon/rare imaging pattern of SSPE.

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Nat PMID:23349608 CO

Thomas, N., Grunnet, L. G., Poulsen, P., Christopher, S., Spurgeon, R., Inbakumari, M., Livingstone, R., Alex, R., Mohan, V. R., Antonisamy, B., Geethanjali, F. S., Karol, R., Vaag,A. and Bygbjerg, I. C.

Born with low birth weight in rural Southern India: What are the metabolic consequences20 years later? European Journal of Endocrinology; 2012, 166 (4): 647-655

Objective: Low birth weight (LBW) is common in the Indian population and may represent an important predisposing factor for type 2 diabetes (T2D) and the metabolic syndrome.Intensive metabolic examinations in ethnic LBW Asian Indians have been almost exclusivelyperformed in immigrants living outside India. Therefore, we aimed to study the metabolic

impact of being born with LBW in a rural non-migrant Indian population. Subjects and methods: One hundred and seventeen non-migrant, young healthy men were recruited from a birth cohort in a rural part of south India. The subjects comprised 61 LBW and 56 normal birth weight (NBW) men, with NBW men acting as controls. Subjects underwent a hyperinsulinaemic euglycaemic clamp, i.v. and oral glucose tolerance tests and a dual- energy X-ray absorptiometry scan. The parents' anthropometric status and metabolic parameters were assessed. Results: Men with LBW were shorter (167 ± 6.4 vs 172 ± 6.0 cm, P < 0.0001), lighter (51.9 ± 9 vs 55.4 ± 7 kg, P = 0.02) and had a reduced lean body mass (42.1 ± 5.4 vs 45.0 ± 4.5 kg, P = 0.002) compared with NBW controls. After adjustment for height and weight, the LBW subjects had increased diastolic blood pressure (77 ± 6 vs 75 ± 6 mmHg, P = 0.01). Five LBW subjects had impaired glucose tolerance. In vivo insulin secretion and peripheral insulin action were similar in both the groups. Mothers of the LBW subjects were 3 cm shorter than the control mothers. Conclusion: Only subtle features of the metabolic syndrome and changes in body composition among LBW rural Indians were found. Whether other factors such as urbanisation and ageing may unmask more severe metabolic abnormalities may require a long-term follow-up. © 2012 European Society of Endocrinology.

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Intl PMID:22250073 CO

Thomas, N., Pulimood, A. B., Kumar, M. and Jana, A. K.

Microvillous inclusion disease diagnosed by gastric biopsy Indian Pediatrics; 2012, 49 (1): 58-60

Protracted diarrhea in neonates is uncommon and usually requires an intestinal biopsy foretiological diagnosis. Gastric biopsy has not been used in the routine diagnosis of this condition. We report the first documented patient with microvillous inclusion disease from India, where the diagnosis was established by a gastric biopsy.

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Nat PMID:22318102 CO

Thomas, R., Christopher, D. J., Thangakunam, B. and Samuel, R.

Tracheal schwannoma as a mimic of bronchial asthma Singapore Medical Journal; 2012, 53 (5): e95-e96

Primary tracheal tumours are rare and less frequently observed than bronchial tumours. Primary neurogenic tumours of the trachea as schwannomas or neurilemmomas areextremely uncommon. We report a tracheal schwannoma in a female patient who presentedwith breathlessness and wheeze, and she was being treated for asthma. Flexible bronchoscopy revealed a large pedunculated tracheal mass and biopsy confirmed schwannoma. She was treated with laser ablation with partial reduction of the tumour. Subsequently, she was lost to follow-up, although resection of the tumour with tracheal reconstruction was planned.

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Intl PMID:22584990 CO

Thomas, S. G., Joseph, V. and Rajshekhar, V.

Temporal progression and spatial distribution of "normal" prevertebral soft tissue swelling following central corpectomy for cervical spondylotic myelopathyNeurology India; 2012, 60 (2): 217-223

Objective: To document the temporal progression and spatial distribution of prevertebral soft tissue swelling

(PSTS) after central corpectomy (CC) and to determine the variablesaffecting its severity. Background: The natural attributes of PSTS following CC for cervicalspondylotic myelopathy (CSM) have not been characterized in literature. Materials and Methods: PSTS was measured at the C2 level and midpoint of the operated segment on lateral radiographs of the cervical spine taken pre-operatively and post-operatively (day 0, day 3/4, day 5 and day 6/7) in 93 patients with CSM undergoing one to three level uninstrumented CC. Patients age, weight, Nuricks grade, number of corpectomy levels and intubation time were correlated with the PSTS. Results: Proportionately, the swelling was maximal at the C2 level rather than at the level of CC, on all days, irrespective of the level of surgery. At the C2 level, the increase in PSTS was maximum by day 3/4 (P = 0.0001), whereas at the CC level, the PSTS continued to increase till day 5 (P = 0.0001). PSTS was higher in patients undergoing a three-level CC and in those with inclusion of C4 in the CC (P= 0.002). Conclusion: Patients undergoing CC are at risk for upper airway obstruction mainly at the C2 level in the first 3 days after surgery due to the PSTS. Those undergoingthree-level CC, or having inclusion of C4 in the CC, have a greater degree of PSTS and havea higher risk of post-operative airway obstruction.

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Nat PMID:22626707 CO

Turel, M. K., Asha, H. S., Rajaratnam, S., Chacko, G. and Chacko, A. G.

Thyroid stimulating hormone microadenoma as a rare cause of thyrotoxicosis amenable to surgical cureJournal of Clinical Neuroscience; 2012, 19 (6): 887-888

Hyperthyroidism due to a thyroid stimulating hormone (TSH) pituitary adenoma is rare. We report a 29-year-old woman with thyrotoxicosis and elevated serum 3,5,32 ,52 -tetraiodothyronine and TSH levels that resolved after a transsphenoidal excision of thedetected TSH pituitary adenoma. The diagnosis and management options in such patients are reviewed.

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Intl PMID:22153796 CO

Turel, M. K., Joseph, V., Singh, V., Moses, V. and Rajshekhar, V.

Primary telangiectatic osteosarcoma of the cervical spine: Case reportJournal of Neurosurgery: Spine; 2012, 16 (4): 373-378

Telangiectatic osteosarcoma (TOS) is one of the 8 subtypes of osteosarcoma that infrequently affects the spine. The radiopathological features of TOS overlap with those ofmore benign entities, most commonly the aneurysmal bone cyst), and therefore is asignificant diagnostic challenge. It is a rare but well-described entity in the thoracolumbar and sacral spine, and to the authors' knowledge has not been previously reported in the cervical spine. The authors report the case of a 15-year-old boy who presented with a 6-month history of neck pain and torticollis. He underwent preoperative glue embolization followed by a staged subtotal C-5 spondylectomy and posterior fusion for a C-5 vertebral body lytic expansile lesion. Histopathological examination showed the lesion to be TOS. The surgery was followed by adjuvant radiation and chemotherapy with a favorable outcome at the 1-year follow-up. This report reiterates that TOS is an important differential diagnosis for aneurysmal bone cyst and giant-cell tumor of the spine, as its biological behavior and clinical outcome differ from those of these more benign lesions, which it mimics.

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Intl PMID:22225487 CO

Turel, M. K., Moorthy, R. K. and Rajshekhar, V.

Multidrug-resistant tuberculous subdural empyema with secondary methicillin-resistant Staphylococcus aureus infection: An unusual presentation of cranial tuberculosis in an infantNeurology India; 2012, 60 (2): 231-234

Despite tuberculosis (TB) being endemic in many parts of the world, its prevalence in infancy is low.

Neurotuberculosis in this age is even rarer and presents either as meningitis or intracranial tuberculoma on the background of exposure to the disease. We report occurrence of multidrug-resistant tuberculous subdural empyema in a three-month-old girl as the initial presenting manifestation of TB in the absence of any exposure to the disease. She was successfully managed with surgery and drugs with good outcome at 18 months.

Address: Department of Neurological Sciences, Christian Medical College, Vellore-632 004, Tamil Nadu, India

Nat PMID: 22626710 CO

Varghese, A. M., Mathew, J., Alexander, A., Thenmozhi, K., Evangelin, G. L. and Kurien, M.

Bilateral Simultaneous Cochlear Implantation in Children: Report of a Case and Review of LiteratureIndian Journal of Otolaryngology and Head and Neck Surgery; 2012, 64 (1): 95-96

The benefits of bilateral cochlear implant in adults are well established. Auditory ability in children is also substantially improved by binaural hearing. We report the first case ofbilateral simultaneous paediatric cochlear implant in India and discuss the merits of bilateralimplant. © 2011 Association of Otolaryngologists of India.

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Nat PMID:23449284 CO

Varghese, R. T., Mahesh, D. M., Oommen, R., Prasad, J. H. D., Unnikrishnan, L. S. andThomas, N.

Emesis in diabetes mellitusPrimary Care Diabetes; 2012, 6 (4): 337-340

It is estimated that 20-40% of patients with diabetes, particularly those with prolonged duration of type 1 diabetes mellitus with other complications develop gastroparesis.We present in a picture quiz format the interesting case of an elderly lady presenting with diabetic gastroparesis in a tertiary care hospital in India. © 2012 Primary Care DiabetesEurope. All rights reserved.

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Intl PMID:22944318 CO

Venkatramani, V., Mukha, R. P. and Kekre, N. S.

Equivocal pelvi-ureteric junction obstruction manifesting in a renal transplant recipient Indian Journal of Urology; 2012, 28 (3): 350-352

Partial and intermittent pelvi-ureteric junction obstruction (PUJO) can potentially confound the diagnosis of upper tract obstruction. We report the case of a gentleman who received a renal graft from his sister. The donor kidney had a box-shaped extra-renal pelvis, which showed unobstructed drainage on the diuretic renogram. However, it manifested in the recipient as PUJO, and he needed pyelo-native ureterostomy for deteriorating graftfunction. The purpose of this report is to highlight a seemingly innocuous entity in the donor that may manifest in the recipient with significant consequences on graft function. It also discusses the appropriate timing of intervention in these cases.

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Nat PMID: 23204671 CO

Venkatramani, V., Panda, A. and Devasia, A.

Emphysematous pyelonephritis in a renal transplant recipient - Is it possible to salvage the graft?Annals of Transplantation; 2012, 17 (3): 138-141

Background: Emphysematous pyelonephritis (EPN) is a rare but potentially devastating complication after renal transplantation. It carries the risk of graft loss and is associated with a high mortality. The majority of cases reported thus far have undergone graftnephrectomy. Case Report: We report the case of a live-related renal transplant recipientwho presented 10 years later with fever, graft tenderness and worsening serum creatinine. Computed tomography (CT) revealed emphysematous pyelonephritis, with a large perinephric collection. The case was managed successfully by percutaneous drainage. Conclusions: Percutaneous drainage is a safe and effective therapeutic modality in cases of EPN in transplant recipients, and allows salvage of

the renal allograft in most cases. © Ann Transplant, 2012.

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Intl PMID: 23018267 CO

Vimal, M., Masih, D., Manipadam, M. T. and Chacko, K. N.

Xanthoma of the urinary bladder - A rare entityIndian Journal of Urology; 2012, 28 (4): 461-462

Xanthomas of the urinary bladder are rare. They may be associated with metabolic disorders. We hereby report a case of bladder xanthoma.

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Nat PMID: 23450680 CO

Viswabandya, A., Baidya, S., Nair, S. C., Abraham, A., George, B., Mathews, V., Chandy, M. and Srivastava, A.

Correlating clinical manifestations with factor levels in rare bleeding disorders: A reportfrom Southern IndiaHaemophilia; 2012, 18 (3): e195-e200

Data on the clinical manifestations of patients with clotting factor defects other than Haemophilia A, B and von Willebrand disease are limited because of their rarity. Due to their autosomal recessive nature of inheritance, these diseases are more common in areas where there is higher prevalence of consanguinity. There is no previous large series reported from southern India where consanguinity is common. Our aim was to analyze clinical manifestations of patients with rare bleeding disorders and correlate their bleeding symptoms with corresponding factor level. Data were collected in a standardized format from our centre over three decades on 281 patients who were diagnosed with rare bleeding disorders (fibrinogen, prothrombin, factor V (FV), FVII, FX, FXI, FXIII and combined FV or FVIII deficiency). Patients with liver dysfunction or those on medications which can affect factor level were excluded. All patients with <50% factor levels were included in this analysis. Patients were analysed for their salient clinical manifestations and it wascorrelated with their factor levels. The data shows that FXIII deficiency is the commonestand FXI deficiency is the rarest in Southern India. There was no significant difference in bleeding symptoms among those who were < or >1% factor coagulant activities among all disorders, except for few symptoms in FVII and FX deficiency. An international collaborative study is essential to find out the best way of classifying severity in patients with rare bleeding disorders. © 2012 Blackwell Publishing Ltd.

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Intl PMID: 22221743 CO

Zachariah, J. R., Gupta, A. K. and Lamba, S.

Arteriovenous malformation of the scrotum: Is preoperative angioembolization a necessity Indian Journal of Urology; 2012, 28 (3): 329-334

Arteriovenous malformations (AVMs) of the scrotum are uncommon lesions, usually picked up incidentally during the evaluation of scrotal masses or infertility. They have also been reported to present with acute bleeding. We present a case who presented with acute pain following an abandoned surgical attempt at excision, elsewhere. Diagnosis was confirmed by duplex ultrasound and magnetic resonance imaging. Angioembolization was deferred quoting concerns with radiation exposure. The patient underwent a near total excision of the scrotal mass. This is the first reported case, in the English literature, of a surgical resection of a scrotal AVM without a preceding angioembolization. Patients should be counselled about radiation exposure risks before angioembolization, and allowed to make an informed decision.

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Nat PMID: 23204665 CO

Ballen, K. K., Woolfrey, A. E., Zhu, X., Ahn, K. W., Wirk, B., Arora, M., George, B., Savani, B. N., Bolwell, B., Porter, D. L., Copelan, E., Hale, G., Schouten, H. C., Lewis, I.,Cahn, J. Y., Halter, J., Cortes, J., Kalaycio, M. E., Antin, J., Aljurf, M. D., Carabasi, M. H., Hamadani, M., Mccarthy, P., Pavletic, S., Gupta, V., Deeg, H. J., Maziarz, R. T.,Horowitz, M. M. and Saber, W.

Allogeneic Hematopoietic Cell Transplantation for Advanced Polycythemia Vera andEssential ThrombocythemiaBiology of Blood and Marrow Transplantation; 2012, 18 (9): 1446-1454

Allogeneic hematopoietic cell transplantation (HCT) is curative for selected patients with advanced essential thrombocythemia (ET) or polycythemia vera (PV). From 1990 to2007, 75 patients with ET (median age 49 years) and 42 patients with PV (median age53 years) underwent transplantations at the Fred Hutchinson Cancer Research Center (FHCRC; n = 43) or at other Center for International Blood and Marrow Transplant Research (CIBMTR) centers (n = 74). Thirty-eight percent of the patients had splenomegaly and 28% had a prior splenectomy. Most patients (69% for ET and 67%for PV) received a myeloablative (MA) conditioning regimen. Cumulative incidence of neutrophil engraftment at 28 days was 88% for ET patients and 90% for PV patients. Acute graft-versus-host disease (aGVHD) grades II to IV occurred in 57% and 50% of ET and PV patients, respectively. The 1-year treatment-related mortality (TRM) was27% for ET and 22% for PV. The 5-year cumulative incidence of relapse was 13% for ETand 30% for PV. Five-year survival/progression-free survival (PFS) was 55%/47% and71%/48% for ET and PV, respectively. Patients without splenomegaly had faster neutrophil and platelet engraftment, but there were no differences in TRM, survival, or PFS. Presence of myelofibrosis (MF) did not affect engraftment or TRM. Over 45% of the patients who undergo transplantations for ET and PV experience long-term PFS. © 2012American Society for Blood and Marrow Transplantation.

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Intl PMID:22449610 CO

Barman, A., Chatterjee, A., Prakash, H., Viswanathan, A., Tharion, G. and Thomas, R.

Traumatic brachial plexus injury: Electrodiagnostic findings from 111 patients in a tertiary care hospital in IndiaInjury; 2012, 43 (11): 1943-1948

Objective: The study aims to characterise the electrodiagnostic findings of patients with traumatic brachial plexus injuries (BPIs) in India and to analyse the association between aetiologies and levels of injuries. Methods: A total of 111 consecutive electrodiagnostic studies done between January 2009 and June 2011 on persons with traumatic BPI were retrospectively analysed. Setting: Electrodiagnostic Laboratory, Department of Physical Medicine and Rehabilitation in a tertiary care university teaching hospital in South India. Main outcome measures: Nerve conduction velocities and electromyography (EMG) to locate the level of BPI, Dumitru and Wilbourne scale to assess the severity of BPI. Results: We studied 106 males and five females, ranging from 11 to 59

years of age. All but one had unilateral BPI. Motorcycle crashes were the most frequent cause (n = 64,58%). Isolated supraclavicular injury was found in 98 arms (88%) and infraclavicular injury in seven arms (6%). Root-level injuries were more common in motorcycle crashesand occupation-related trauma, while trunk-level injuries were more often found inautomobile crashes, falls, bicycle-related trauma and penetrating wounds. Pan root (C5- T1) involvement was more common in the motorcycle trauma group (74%). There was no significant association between aetiologies and levels of BPIs. A total of 73 (65%) plexus injuries were of 'severe' category as per Dumitru and Wilbourn scale. Conclusions: Motorcycle crash is the most common cause of traumatic BPIs. Supraclavicular injury is the rule in most cases. Proper attention needs to be given to differentiate the mild to moderate injuries from the severe injuries with EMG techniques since most of the cases are severe. There was no significant association found between aetiologies and levels of injury.

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Intl PMID:22884248 co

Battiwalla, M., Ellis, K., Li, P., Pavletic, S. Z., Akpek, G., Hematti, P., Klumpp, T. R., Maziarz, R. T., Savani, B. N., Aljurf, M. D., Cairo, M. S., Drobyski, W. R., George, B.,Hahn, T., Khera, N., Litzow, M. R., Loren, A. W., Saber, W., Arora, M., Urbano-Ispizua,A., Cutler, C., Flowers, M. E. D. and Spellman, S. R.

HLA DR15 Antigen Status Does Not Impact Graft-versus-Host Disease or Survival inHLA-Matched Sibling Transplantation for Hematologic MalignanciesBiology of Blood and Marrow Transplantation; 2012, 18 (8): 1302-1308

The HLA class II DRB1 antigen DR15 is an important prognostic marker in immune- mediated marrow failure states. DR15 has also been associated with favorable outcomes (reduced acute graft-versus-host disease [aGVHD] and relapse) after allogeneic hematopoietic cell transplant. To elucidate the impact of DR15 on transplantation outcomes, we conducted a retrospective study of 2891 recipients of first allogeneic stem cell transplant from HLA-matched sibling donors for the treatment of acute leukemia, chronic myeloid leukemia, or myelodysplastic syndrome (MDS) between 1990 and 2007. All patients received conventional myeloablative conditioning, T-replete grafts, and cyclosporine plus methotrexate-based GVHD prophylaxis. DNA-based HLA typingallowed categorization of 732 patients (25.3%) as positive and 2159 patients (74.7%) as negative for DRB1*15:01 or *15:02 (DR15). There were no significant differences in baseline characteristics between the HLA DR15 positive and negative groups. In univariate analysis, HLA-DR15 status had no impact on neutrophil engraftment, aGVHD, chronic GVHD (cGVHD), treatment-related mortality, relapse, disease-free survival, or overall survival (OS). In multivariate analysis, DR15 status showed no significant difference in aGVHD, cGVHD, OS, or relapse. In conclusion, DR15 status had no impact on major HLA-matched sibling donor hematopoietic cell transplant outcomes in thislarge and homogenous cohort of patients with leukemia and MDS.

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Intl PMID:22414493 CO

Battiwalla, M., Wang, T., Carreras, J., Deeg, H. J., Ayas, M., Bajwa, R. P. S., George, B., Gupta, V., Pasquini, R., Schrezenmeier, H., Passweg, J. R., Schultz, K. R. and Eapen, M.

HLA-Matched Sibling Transplantation for Severe Aplastic Anemia: Impact of HLA DR15Antigen Status on Engraftment, Graft-versus-Host Disease, and Overall SurvivalBiology of Blood and Marrow Transplantation; 2012, 18 (9): 1401-1406

The HLA class II DRB1 antigen DR15 (common alleles *1501, *1502) is an important marker in the pathobiology of severe aplastic anemia (SAA). We studied 1204 recipientsof HLA-matched sibling bone marrow transplantation for SAA to determine whether HLADR15 status (as determined by allele-level typing) affected hematopoietic recovery, graft-versus-host disease (GVHD), or overall survival (OS). In multivariate analysis, secondary graft failure rate at 2 years was lower in patients who were HLA DR15+ (hazard ratio = 0.46, P = .01). However, neutrophil recovery at day -28, platelet recovery at day -100, acute GVHD, chronic GVHD, and overall mortality were independent of DR15 status. The 5-year probabilities of OS, after adjusting for age, race, performance score, transplant-conditioning regimen, and year of transplantation, were 78% and 81% for patients who were HLA DR15+ and HLA DR15-, respectively (P= .35). In conclusion, DR15 status is associated with secondary graft failure after HLA- matched sibling bone marrow transplantation for SAA but has no significant impact onsurvival. © 2012.

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Intl PMID:22387349 CO

Chacko, A. G., Joseph, M., Turel, M. K., Prabhu, K., Daniel, R. T. and Jacob, K. S.

Multilevel oblique corpectomy for cervical spondylotic myelopathy preserves segmental motionEuropean Spine Journal; 2012, 21 (7): 1360-1367

Purpose: To document the neurological outcome, spinal alignment and segmental range of movement after oblique cervical corpectomy (OCC) for cervical compressive myelopathy. Methods: This retrospective study included 109 patients-93 with cervical spondylotic myelopathy and 16 with ossified posterior longitudinal ligament in whom spinal curvature and range of segmental movements were assessed on neutral and dynamic cervical radiographs. Neurological function was measured by Nurick's gradeand modified Japanese Orthopedic Association (JOA) scores. Eighty-eight patients (81%) underwent either a single- or two-level corpectomy; the remaining (19%) undergoing three- or four-level corpectomies. The average duration of follow-up was30.52 months. Results: The Nurick's grade and the JOA scores showed statistically significant improvements after surgery ($p < 0.001$). The mean postoperative segmental angle in the neutral position straightened by 4.7 –" 6.5°. The residual segmental range ofmovement for a single-level corpectomy was 16.7° (59.7% of the preoperative value), for two-level corpectomy it was 20.0° (67.2%) and for three-level corpectomies it was22.9° (74.3%). 63% of patients with lordotic spines continued to have lordosis postoperatively while only one became kyphotic without clinical worsening. Four patientswith preoperative kyphotic spines showed no change in spine curvature. None developedspinal instability. Conclusions: The OCC preserves segmental motion in the short-term, however, the tendency towards straightening of the spine, albeit without clinical worsening, warrants serial follow-up imaging to determine whether this motion preservation is long lasting. © Springer-Verlag 2012.

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Intl PMID:22234720 CO

Chandramohan, A., Sathyakumar, K., Irodi, A., Abraham, D. and Paul, M. J.

Causes of discordant or negative ultrasound of parathyroid glands in treatment naïve patients with primary hyperparathyroidismEuropean Journal of Radiology; 2012, 81 (12): 3956-3964

Objectives: To describe causes of discordant or negative parathyroid ultrasound and to assess factors influencing them. Materials and methods: Retrospective review ofpatients who underwent parathyroidectomy between 2000 and 2012 was done. Imaging findings were compared with operative findings and pathology to identify discrepant (n= 60; 32 negative, 28 incorrect) parathyroid ultrasounds. Results: Fifty (83.3%)patients had parathyroid adenoma, of which 10 (16.6%) were ectopic and three were double adenomas; 8 (13.3%) had multigland hyperplasia and two had parathyroid carcinoma. Discrepant reports were due to incorrect localisation in 8 (13.3%); difficultyin differentiating thyroid from parathyroid lesion in 12 (20%); large and small size intwo and three patients, respectively; overcall in 5 (8.3%) and satisfaction of search in 7 (11.7%) patients. There was significant correlation between presence of multi-nodular goitre and incorrect reports (÷2 = 4.112, p = 0.04). Experience of ultrasound operators performing initial and second look ultrasound was significantly different (p < 0.0001). Second look ultrasound was concordant with surgical findings in 39(65%) patients; 21 (66%) patients with initially negative ultrasound and four out of five extra-mediastinal ectopic lesions. Ten patients with negative initial ultrasound had elongated parathyroid lesion. Scintigraphy was concordant in 44 (73.3%) patients and nine were ectopic. Conclusion: Second look ultrasound performed by experienced operator for negative or discordant initial ultrasound of parathyroid is a useful strategy which will improve the accuracy of parathyroid ultrasound. Being able to differentiate thyroid from parathyroid lesion is a factor which will influence performance of parathyroid ultrasound. © 2012Elsevier Ireland Ltd© 2011 Elsevier Ireland Ltd. All rights reserved.

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Intl PMID:23017194 CO

Chendamarai, E., Balasubramanian, P., George, B., Viswabandya, A., Abraham, A., Ahmed, R., Alex, A. A., Ganesan, S., Lakshmi, K. M., Sitaram, U., Nair, S. C., Chandy,M., Janet, N. B., Srivastava, V. M., Srivastava, A. and Mathews, V.

Role of minimal residual disease monitoring in acute promyelocytic leukemia treated with arsenic trioxide in frontline therapyBlood; 2012, 119 (15): 3413-3419

Data on minimal residual disease (MRD) monitoring in acute promyelocytic leukemia (APL) are available only in the context of conventional all-trans retinoic acid plus chemotherapy regimens. It is recognized that the kinetics of leukemia clearance is different with the use of arsenic trioxide (ATO) in the treatment of APL. We undertook a prospective peripheral blood RT-PCR-based MRD monitoring study on patients with APL treated with a single agentATO regimen.Atotal of 151 patients were enrolled in this study. A positive RT-PCR reading at the end of induction therapy was significantly associated on a multivariate analysis with an increased risk of relapse (relative risk =4.9; P = .034). None of the good risk patients who were RT-PCR negative at the end of induction relapsed. The majority of the relapses (91%) happened within 3 years of completion of treatment. After achievement of molecular remission, the current MRD monitoring strategy was able to predict relapse in 60% of cases with an overall sensitivity and specificity of 60% and 93.2%, respectively. High-risk group patients and those that remain RT-PCR positive at the end of induction are likely to benefit from serial MRD monitoring by RT-PCR for a period of 3 years from completion of therapy. ©2012 by The American Society of Hematology.

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Intl PMID:22374701 CO

Choudhrie, A. V., Kumar, S., Gnanaraj, L., Devasia, A., Chacko, N. and Kekre, N. S.

Symptomatic lymphocoeles post renal transplant Saudi journal of kidney diseases and transplantation : an official publication of the SaudiCenter for Organ Transplantation, Saudi Arabia; 2012,Saudi J Kidney **Dis Transpl. 2012 Nov;23(6):1162-8. doi: 10.4103/1319-2442.103554.**

The aim of this study was to evaluate the outcome of various treatment modalities ofsymptomatic lymphoceles and suggest an optimal management protocol. Case recordsof 744 renal transplant recipients who underwent surgery between January 2000 and December 2007 were retrospectively reviewed. There were a total of 36 (4.38%) lymphoceles detected in the postoperative period, of which 14 (1.88%) were symptomatic. A total of 32 procedures for the treatment of lymphocele were performed in 14 of these patients. Aspiration or percutaneous catheter drainage was performed as a primary procedure in all cases. Open marsupialization and laparoscopic marsupialization procedures were performed as secondary treatments. Percutaneous nephrostomy was required in one case before definitive treatment. Primary aspiration was successful in (n = 2) 28.5% and percutaneous drainage in (n = 3) 42.8%. Sclerotherapy was definitive in (n = 2 of 3) 66.6%. Seven of 14 patients required secondary procedure. Laparoscopic marsupialization was successful in (n = 4 of 5) 80%and open technique (n = 3) was curative in all cases. In our opinion, the first step in the management of symptomatic lymphocele in post-renal transplant recipients should be percutaneous drainage with or without drug instillation. This can stabilize renal function and optimize patients who may require surgery. Surgical marsupialization offerssuperior definitive treatment of lymphoceles with the least recurrence rates.

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Intl PMID: 23168843 CO

Dalal, A., Bhavani, S. L., Togarrati, P. P., Bierhals, T., Nandineni, M. R., Danda, S., Danda, D., Shah, H., Vijayan, S., Gowrishankar, K., Phadke, S. R., Bidchol, A. M., Rao,A. P., Nampoothiri, S., Kutsche, K. and Girisha, K. M.

Analysis of the WISP3 gene in Indian families with progressive pseudorheumatoid dysplasiaAmerican Journal of Medical Genetics, Part A; 2012, 158 A (11): 2820-2828

Progressive pseudorheumatoid dysplasia (PPD) is a progressive skeletal syndrome characterized by stiffness, swelling and pain in multiple joints with associatedosteoporosis in affected patients. Radiographically, the predominant features resemble aspondyloepiphyseal dysplasia. Mutations in the WISP3 gene are known to cause this autosomal recessive condition. To date, only a limited number of studies have looked into the spectrum of mutations causing PPD. We report on clinical features and WISP3 mutations in a large series of Indian patients with this rare skeletal dysplasia. Families with at least one member showing clinical and radiologic features of PPD were recruited for the study. Symptoms, signs and radiographic findings were documented in 35 patients from 25 unrelated families. Swelling of small joints of hands and contractures are the most common presenting features. Mutation analysis was carried out by bidirectional sequencing of the WISP3 gene in all 35 patients. We summarize the clinical features of 35 patients with PPD and report on 11 different homozygous mutations andone instance of compound heterozygosity. Eight (c.233G>A, c.340T>C, c.348C>A,c.433T>C, c.682T>C, c.802T>G, c.947_951delAATTT, and c.1010G>A) are novel mutations and three (c.156C>A, c.248G>A, and c.739_740delTG) have been reported previously. One missense mutation (c.1010G>A; p.Cys337Tyr) appears to be the most common in our population being seen in 10 unrelated families. This is the largest cohort of patients with PPD in the literature and the first report from India on mutation analysis of WISP3. We also review all the mutations reported in WISP3 till date.

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Intl PMID: 22987568 CO

Ekbote, A. V., Danda, D., Kumar, S., Danda, S. and Gibikote, S.

A descriptive analysis of 14 cases of progressive-psuedorheumatoid-arthropathy of childhood from south India: Review of literature in comparison with Juvenile Idiopathic ArthritisSemin Arthritis Rheum. 2012 Dec 25. pii: S0049-0172(12)00224-7. doi:10.1016/j.semarthrit.2012.09.001. [Epub ahead of print]

Background: Progressive-psuedorheumatoid-arthropathy of childhood (PPAC) is an autosomal recessive single gene skeletal dysplasia involving joints. The gene attributedto its cause is WNT1-inducible-signaling pathway protein3 (WISP3). Objective: To studythe clinical and radiographic presentation of PPAC in Indian patients and to compare with described features of PPAC and Juvenile Idiopathic Arthritis (JIA) from published literature. Methods: All cases (n = 14) of PPAC seen in the Rheumatology and Clinical Genetics outpatient clinic between 2008 and 2011 with classical, clinical, and radiological features were studied. The demographic and clinical data were obtained from medical records of the outpatient visits. Results: Slight female preponderance (57%) and history of consanguinity in parents (43%) was observed in this group. The median age at onset was 4.5 years (range from birth to 9 years of age). Early presentation below the age of 3 years was seen in 3/14 patients (21%) in this group. The growth of all the patients fell below the 3rd percentile for the age. Historically, hip joint involvement was the most common presenting feature; however, elbow, wrist, knees, feet, spine, shoulder joints and small joints, namely proximal interphalangeal (PIP), distal interphalangeal (DIP), metacarpophalangeal (MCP), metatarsophalangeal joints (MTP), and interphalangeal joints (IP) of the feet, were also involved, eitherclinically or radiologically in varying proportions. Platyspondyly was noted in all.Molecular analysis of the WISP3 gene identified mutations in all the 5 individuals in whom it was done. Conclusion: This descriptive case series of PPAC from India reports distinctly differentiating clinical, radiological, and molecular markers in contrast with classically described features of JIA, its mimic. Early presentation (age of onset below 3 years) with involvement of interphalangeal joints seen in three patients (21%) was a unique finding, with missense WISP3 gene mutations in all of them. Timely diagnosis of this entity can spare the patient from unnecessary investigations and toxic medications.

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Intl PMID:23270760 CO

Elias, J. E., Mackie, I., Eapen, C. E., Chu, P., Shaw, J. C. and Elias, E.

Porto-pulmonary hypertension exacerbated by platelet transfusion in a patient withADAMTS13 deficiencyJ Hepatol. 2012 Nov 10. pii: S0168-8278(12)00835-5. doi:10.1016/j.jhep.2012.11.003. [Epub ahead of print]

Journal of Hepatology; 2012, We propose that porto-pulmonary hypertension (PPH) may arise as a consequence of deficiency of ADAMTS13 (a plasma metalloprotease that regulates von Willebrand factor size and reduces its platelet adhesive activity) and provide a clinical case history to support our hypothesis. A patient with non-cirrhotic intrahepatic portal hypertension (NCIPH), ulcerative colitis and celiac disease developed symptoms of PPH, which had advanced beyond levels which would have made her an eligible candidate for liver transplantation (mean pulmonary artery pressure (PAP) 49 mmHg). She was known to have severe ADAMTS13 deficiency, which we considered to be causative of, or contributory to her NCIPH. We postulated that increasing porto- systemic shunting associated with advancing portal hypertension would make the next encountered vascular bed, the

lung, susceptible to the pathogenic process that was previously confined to the portal system, with pulmonary hypertension as its consequence. Her pulmonary artery pressures fell significantly during the next year on weekly replacement of plasma ADAMTS13 by infusions of fresh frozen plasma and conventional drug treatment of her pulmonary hypertension. Her pulmonary artery pressures had fallen to acceptable levels when, in response to platelet infusion, it rose precipitously and dangerously. The sequence strongly supports our hypothesis that PPH is a consequence of ADAMTS13 deficiency and is caused by platelet deposition in afferent pulmonary vessels. © 2012 European Association for the Study of the Liver.

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Intl PMID:23149063 CO

Goel, A., Dutta, A. K., Pulimood, A. B., Eapen, A. and Chacko, A.

Clinical profile and predictors of disease behavior and surgery in Indian patients withCrohn's diseaseIndian J Gastroenterol. 2013 Feb 16. [Epub ahead of print]

Background: Recent years have seen the emergence of Crohn's disease (CD) in India and the predictors of disease behavior and surgery in these patients are not known.Methods: The demographic and clinical profiles of patients diagnosed to have CD fromJanuary 1995 to December 2008 were analyzed retrospectively and associations with disease behavior and surgery were determined using multivariate analysis. Results: Two hundred and twenty-three patients (age 35 ± 14.7 years, males 57.9 %) were included. Extraintestinal manifestations were noted in 27.4 % patients. There was a median delay of 24 months to diagnosis; 66 (29.6 %) patients received antitubercular therapy prior to diagnosis. The most common site of involvement was ileocolonic (40.4 %), and themost common disease behavior was nonstricturing and nonpenetrating (57.8 %). The disease was moderate to severe in 79 %. Around 40 % patients had a relapsing courseof illness. Seventy-three patients (32.7 %) had at least one surgical intervention.Independent associations with aggressive disease behavior included the presence of small bowel disease and longer duration of illness. Predictors of surgical intervention were male sex, small bowel disease, perianal disease, and aggressive disease behavior. Conclusion: Diagnosis of CD is still delayed in India. Longer duration of illness predicted aggressive disease behavior. Surgery was performed more often in males with aggressive disease involving the small bowel and perianal area. © 2012 Indian Society of Gastroenterology.

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Nat PMID: 23417764 CO

Govind, B., Veeraraghavan, B., Anandan, S. and Thomas, N.

Haemophilus parainfluenzae: Report of an unusual cause of neonatal sepsis and a literature review Journal of Infection in Developing Countries; 2012, 6 (10): 748-750

Haemphilus parainfluenzae, an unusual cause of early-onset neonatal sepsis, is rarely reported. Risk factors for this serious infection include prolonged rupture of membranes,choriamnionitis, and prematurity. A high index of suspicion, proper culture techniques,and rapid species identification are needed to diagnose H. parainfluenzae sepsis. We present the first documented case from India with a review of the literature. © 2012Govind et al.

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Intl PMID:23103898 CO

Halder, A. and Jose, R.

Residual Adherent Placenta with Bladder Injury: Can We Use Methotrexate? Journal of Obstetrics and Gynecology of India; 2012, 1-2

Address: Department of Obstetrics and Gynecology, Christian Medical College, OG4Office, 7th Floor, ISSCC Building, Ida Scudder Road, Vellore, 632004, India

Nat CO

Hussain, S. R., Babu, S. G., Raza, S. T., Singh, P., Ahmed, F., Naqvi, H. and Mahdi, F.

Screening of the c-kit gene missense mutation in invasive ductal carcinoma of breast among north Indian populationMolecular Biology Reports; 2012, 39 (9): 9139-9144

Breast cancer is one of the most frequently diagnosed cancers and the leading cause of cancer deaths among females across the world, accounting for 23 % (1.38 million) of total new cancer cases and 14 % (0.45 million) of the total cancer deaths in 2008. c-kit is expressed in mast cell growth factor, cellular migration, proliferation, melanoblasts, haematopoietic progenitors and germ cells. We have designed our study with aim to explore the c-kit gene mutations in invasive ductal carcinoma (IDC) breast. To ascertain the range of mutations in exon 11, 13 and 17 of c-kit gene in 53 cases of IDC breast,we carried out PCR-SSCP followed by DNA sequencing. The mutation frequency of c-kit gene in exon 11, 13 and 17 were 9.43 % (5/53), 1.88 % (1/53) and 3.77 % (2/53), respectively. During our mutational analysis, we have detected five missense mutations in exon 11 (Pro551Leu, Glu562Val, Leu576Phe, His580Tyr and Phe584Leu), one missense mutation in exon 13 (Ser639Pro) and two missense mutations in exon 17 (Arg796Gly and Asn822Ser). It seems that c-kit mutations might participate in breast cancer pathogenesis and may be utilized as predictive marker, since the loss of c-kit positivity is generally linked with different types of breast cancer. Further molecular studies are necessary to validate the association of c-kit gene mutation in IDC breast pathogenesis. © 2012 Springer Science+Business Media B.V.

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Intl PMID:22729910 CO

Jakkani, R., Jyoti, S., Ahmed, M. and Thomas, M. M.

Magnetic resonance imaging findings in adult-form myotonic dystrophy type 1Singapore Medical Journal; 2012, 53 (7): e150-e152

The adult form of myotonic dystrophy type 1 is a neuromuscular disorder with multisystem involvement, including the central nervous system (CNS). The presentingclinical features of this condition include distal muscle weakness, myotonia, intellectualdecline, cataract, frontal baldness and testicular atrophy. Magnetic resonance (MR)imaging shows characteristic white matter changes in the CNS. The clinical presentation, characteristic white matter changes in the brain on MR imaging and electromyographic findings aid in the diagnosis of this disorder.

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Intl PMID:22815033 CO

Johnson, S., Sathyaseelan, M., Charles, H., Jeyaseelan, V. and Jacob, K. S.

Insight, psychopathology, explanatory models and outcome of schizophrenia in India: a prospective 5-year cohort studyBMC Psychiatry. 2012 Sep 27;12:159. doi: 10.1186/1471-244X-12-159.

Background: The sole focus of models of insight on bio-medical perspectives to the complete exclusion of local, non-medical and cultural constructs mandates review. This study attempted to investigate the impact of insight, psychopathology, explanatory models of illness on outcome of first episode schizophrenia.

Method: Patients diagnosed to have DSM IV schizophrenia (n = 131) were assessed prospectively for insight, psychopathology, explanatory models of illness at baseline, 6, 12 and 60 months using standard instruments. Multiple linear and logistic regression and generalized estimating equations (GEE) were employed to assess predictors of outcome. Results: We could follow up 95 (72.5%) patients. Sixty-five of these patients (68.4%) achieved remission. There was a negative relationship between psychosis rating and insight scores. Urban residence, fluctuating course of the initial illness, and improvement in global functioning at 6 months and lower psychosis rating at 12 months were significantly related to remission at 5 years. Insight scores, number of non-medical explanatory models and individual explanatory models held during the later course of the illness were significantly associated with outcome. Analysis of longitudinal data using GEE showed that women, rural residence, insight scores and number of non-medical explanatory models of illness held were significantly associated with BPRS

scores during the study period.Conclusions: Insight, the disease model and the number of non-medical model positively correlated with improvement in psychosis arguing for a complex interaction between the culture, context and illness variables. These finding argue that insight and explanatory models are secondary to psychopathology, course and outcome of theillness. The awareness of mental illness is a narrative act in which people make personal sense of the many challenges they face. The course and outcome of the illness, cultural context, acceptable cultural explanations and the prevalent social stigma interact to produce a complex and multifaceted understanding of the issues. This complexity calls for a nuanced framing of insight. © 2012 Johnson et al.; licensee BioMed Central Ltd.

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Intl PMID: 23013057 CO

Joseph, G. and Kunwar, B. K.

Transseptal Guidewire Stabilization for Device Closure of a Large Pulmonary Arteriovenous Malformation **Cardiovasc Intervent Radiol. 2012 Jul 18. [Epub ahead of print]**

A 46-year-old man presenting with massive hemoptysis was found to have a large pulmonary arteriovenous malformation (PAVM) in the right lung. Closure of the PAVM with an Amplatzer-type duct occluder was hampered by inability to advance the device delivery sheath into the PAVM due to vessel tortuosity and inadequate guidewire support. Atrial septal puncture was performed and a femorofemoral arteriovenous guidewire loop through the right pulmonary artery, PAVM, and left atrium was created. Traction on both ends of the guidewire loop allowed advancement of the device deliverysheath into the PAVM and successful completion of the procedure. Transseptal guidewire stabilization can be a valuable option during device closure of large PAVMs when advancement, stability, or kinking of the device delivery sheath is an issue. © 2012Springer Science+Business Media, LLC and the Cardiovascular and InterventionalRadiological Society of Europe (CIRSE).

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Intl PMID: 22806247 CO

Joseph, G., Janakiraman, E., Subban, V., Jamesraj, J. and Mullasari, A. S.

Concurrent endovascular repair of extensive thoracic aortic and infra-renal aorto-iliac aneurysmsHeart Lung and Circulation; 2012, 21 (12): 803-805A

60 year-old woman presented with large extensive aneurysms in the thoracic aorta and infra-renal abdominal aorta with a normal segment of visceral aorta in between; the entire right common iliac artery was also aneurysmal. Concurrent endovascular repair of all aneurysmal regions was successfully performed using a left common iliac artery conduit to access the aorta, and multiple stent-grafts; a chimney graft preserved blood flow into the left subclavian artery. There were no features of spinal cord ischaemia despite coil embolisation of the right hypogastric artery. CT angiogram at six months showed patent stent-grafts with no endoleaks. The patient continued to do well at one- year clinical follow-up. Concurrent endovascular repair of thoracic and abdominal aortic aneurysms can be safely and successfully performed when anatomically feasible, and is an attractive alternative to staged or hybrid repair. © 2012 Australian and New Zealand Society of Cardiac and Thoracic Surgeons (ANZSCTS) and the Cardiac Society of Australia and New Zealand (CSANZ).

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Intl PMID: 22898592 **CO**

Kamalanathan, S., Mahesh, D. M., Muruganandham, K. and Basu, D.

Black adrenal adenoma: Distinction from PPNAD**BMJ Case Rep. 2012 Jul 3;2012. pii: bcr0320126076. doi: 10.1136/bcr.03.2012.6076.**

A 22-year-old woman with features suggestive of Cushing's syndrome was found to have right adrenal mass on imaging studies. She had paradoxical rise in basal cortisol on dexamethasone suppression testing. Black adenoma of the right adrenal cortex, a pigmented adenoma consisting of compact cells with numerous pigments suggestive of melanin and

lipofuscin was laproscopically removed from this patient. This case illustrates that in the setting of unilateral adrenal mass with paradoxical cortisolresponse with dexamethasone suppression testing, pigmented adrenal adenomas should be also suspected in addition to primary pigmented nodular adrenocortical disease. Thedecision to go with either unilateral or bilateral adrenalectomy should be based on theattributes of contralateral adrenal gland.

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Intl PMID: 22761223 CO

Karthik, R.

Primary hyperparathyroidismJournal of Association of Physicians of India; 2012, 60 (9): 53-54

Address: Department of Medicine 1 and Infectious Diseases, Christian Medical College, Vellore, Tamil Nadus, India

Nat CO

Karthik, R., Pancharatnam, P. and Balaji, V.

Fatal Chromobacterium violaceum septicemia in a South Indian adultJournal of Infection in Developing Countries; 2012, 6 (10): 751-755

Chromobacterium violaceum is a rare human pathogen that causes potentially fatal infections especially in the tropical regions. Limited awareness about this pathogen and inappropriate antibiotic therapy are some of the factors contributing to the high mortality rate. To date there have been only eight cases reported from India of which only one is an adult. To the best of our knowledge, we report here the first case of a 40- year-old man from South India with septicemic C. Violaceum infection and septicarthritis. © 2012 Karthik et al.

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Intl PMID:23103899 CO

Keshava, S. N., Naik, K., Babu, S., Vyas, F., Nair, A. and Agarwal, S.

Splanchnic collateral arterial aneurysms associated with celiac artery compression by median arcuate ligamentVascular Disease Management; 2012, 9 (8): 135-138

An aneurysm developing in hypertrophied pancreaticoduodenal artery associated with a median arcuate ligament compressing the celiac trunk is a relatively rare entity. Wepresent 2 such cases that we managed recently. One presented with retroperitoneal hemorrhage and the other with signs of intra-abdominal mass effect. In both cases the diagnosis was made on computed tomographic scans and confirmed by diagnosticarteriography. Both cases were successfully treated by embolization of the aneurysms.

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Intl CO

Keshava, S., Ahmed, M., Koshy, C., Sen, I. and Stephen, E.

Multiple vascular complications in a single patientVascular Disease Management; 2012, 9 (7): E109-E112

We report an unusual case of a patient with vascular Ehler-Danlos syndrome. This condition is significant because of the possibility of multiple vascular complications that result from increased vascular fragility.

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Intl CO

Koshy, B., Navamani, K., Oommen, S. P. and Srivastava, V. M.

Growth and development profile of indian children with down syndromeIndian Pediatrics; 2012, 49 (8): 676-677

In this retrospective study, we describe the profile of 88 children with Down syndrome. The average BMI for children showed a progressive increase with age. Compared to thepreviously published development

profile, there was a significant improvement in thelanguage domain.

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Nat PMID:22962246 CO

Kurien, R. and Michael, R.

Subglottic thyroglossal duct cyst: a rare intralaryngeal presentationEar, nose, & throat journal; 2012, 91 (7): E15-19

Thyroglossal duct cysts are common midline neck swellings that can present at any site along their migratory pathway. They are frequently situated just below the hyoid bone. Extension to the subglottic area is very rare; such an unusual presentation can complicate the diagnosis of a thyroglossal duct cyst. We report the case of a 30-year-old man who presented with a subglottic thyroglossal duct cyst and associated laryngeal symptoms. To the best of our knowledge, only 2 similar cases have been previously reported in the literature, both of which occurred in 2-year-old boys. We believe, therefore, that ours is the first reported case of a subglottic thyroglossal duct cyst in an adult. We discuss the clinical presentation, diagnosis, and treatment of our patient, and we summarize the literature on intralaryngeal thyroglossal duct cysts.

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Intl PMID:22829040 CO

Lamba, S., Gupta, A. K., Nayak, S. and Barreto, E.

Combined prosthetic incisional hernioplasty and panniculectomy-a 5-year single-centre experienceEuropean Journal of Plastic Surgery December 2012, Volume 35, Issue 12, pp 859-865

Background: Ventral incisional hernia patients develop limitation in physical activities as the hernia enlarges, leading to alteration in their lifestyle, quality of life, aestheticdeformities, and occasionally to complications. Cosmetic improvement of the abdomen,an important objective of hernia repair, can be achieved when hernia repair is combined with panniculectomy. The authors undertook this study to review their experience of the integration of hernia repair and panniculectomy to improve the understanding and treatment of this condition. Methods: A retrospective analysis of the records of patients who underwent abdominal hernia repair with panniculectomy from 2005 to 2010 was undertaken. The records were reviewed for patient demographics, hernia etiology, risk factors for recurrence, previous surgeries, previous approach, type of repair, incision approach, complications, length of hospital stay, and duration of follow-up. Surgical management included mesh hernia repair and pannus excision. Results: Of the total 45 patients, mean age was 42.37 years and mean follow-up was 24.4 months. Twelve patients had recurrent hernias. Most of the patients underwent retrorectus underlay mesh repair [39 (86.67 %)], while 6 (13.33 %) underwent onlay mesh technique. Six (13.33 %) patients developed minor skin necrosis, while one (2.22 %) had skin flap necrosis requiring debridement and skin grafting, three (6.67 %) hernias recurred, one (2.22 %) had seroma formation, and one (2.22 %) developed sacral pressure sore. Conclusion: This technique provides both functional and aesthetic benefits and generally meets the needs of the patients. It is safe, with a low risk of postoperative complications. Level of Evidence: Level IV, therapeutic study. © 2012 Springer-Verlag.

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Intl CO

Mayuranathan, T., Rayabaram, J., Edison, E. S., Srivastava, A. and Velayudhan, S. R.

A novel deletion of â-globin promoter causing high HbA2 in an Indian populationHaematologica; 2012, 97 (9): 1445-1447

Address: Department of Haematology, Christian Medical College, Vellore-632004, India

Intl PMID:22581004 CO

Naina, P., Anandan, S., Mathews, S. S., Job, A. and Albert, R. R.

Chronic pharyngitis: role of atypical organisms: a case control study from South IndiaOtolaryngology--head and neck surgery : official journal of American Academy ofOtolaryngol Head Neck Surg. 2012 Nov;147(5):894-9. doi:10.1177/0194599812457344. Epub 2012 Aug 11.

Bacteria including Chlamydophila pneumoniae, Mycoplasma pneumoniae, and anaerobic bacteria such as Fusobacterium necrophorum have been implicated as etiological agents of chronic pharyngitis in Western literature. Because there are no data regarding this from India, the authors undertook this study. Prospective case-control study. Tertiary- level medical college and hospital. In total, 343 consecutive adults with persistent throat pain and/or irritation (duration e"3 months) were screened for known causes of pharyngitis by a thorough clinical and endoscopic examination. In 71 patients, the evaluation performed was unable to determine any cause, and these were considered cases. An enzyme-linked immunosorbent assay test to detect IgA and IgG antibodies to C pneumoniae and M pneumoniae was performed on 66 of these cases and 62 controls. The posterior pharyngeal swabs taken from both the cases and controls were subjected to aerobic and anaerobic culture. Individuals with chronic pharyngitis had a 3.43 times odds of being seropositive for C pneumoniae as compared with controls (P = .001; odds ratio = 3.43). Aerobic organisms and M pneumoniae did not seem to be significant etiological agents for chronic pharyngitis. On the contrary, isolation of Fusobacteriumspp was found to be significantly more in controls as compared with cases. This study suggests an association between IgA antibodies to C pneumoniae and chronic pharyngitis. Further studies using more specific tests combined with long-term follow-up are needed to confirm these findings.

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Intl PMID: 22886080 CO

Pal, S., Simon, E. G., Koshy, A. K., Ramakrishna, B. S., Raju, R. S., Vyas, F. L., Joseph, P., Sitaram, V. and Eapen, A.

Spontaneous choledochal cyst rupture in pregnancy with concomitant chronic pancreatitisIndian J Gastroenterol. 2012 Dec 13. [Epub ahead of print]

Choledochal cysts are rare cystic transformations of the biliary tree that are increasingly diagnosed in adult patients. We report here a case of spontaneous rupture of a choledochal cyst in a pregnant young lady with chronic pancreatitis. © 2012 IndianSociety of Gastroenterology.

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Nat PMID: 23238690 CO

Patro, N., Georg, R., Singh, P. and Joseph, G.

Cutaneous cholesterol embolization syndrome: A case reportDermatol Online J. 2012 Jul 15;18(7):10.

An 81-year-old woman with chronic kidney disease, systemic hypertension, and a large infra-renal abdominal aortic aneurysm, developed bilateral calf muscle pain, altered sensorium, and deterioration of renal function following endovascular aneurysmal repair. On the third post-operative day she developed symmetrical purpuric macules with erythematous margins on the gluteal region and bluish reticulated patches on the soles and tips of toes. This was followed by melena development on the seventh post- operative day. Histology of the skin confirmed the diagnosis of cutaneous cholesterol embolization syndrome (CES). She was treated with hemodialysis and supportive management and she recovered. © 2012 Dermatology Online Journal.

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Intl PMID:22863632 CO

Pratheesh, R., Rajaratnam, S., Prabhu, K., Mani, S. E., Chacko, G. and Chacko, A. G.

The current role of transcranial surgery in the management of pituitary adenomasPituitary. 2012 Oct 18. [Epub ahead of print]

The aim of this study was to determine the factors influencing the use of a transcranial(TC) approach in pituitary adenomas and suggest a decision-making tree for the surgical strategy. The data for 23 (4.6 %) patients

who underwent TC surgery from amongst494 pituitary adenomas were retrospectively analyzed. Eight factors on magnetic resonance imaging (MRI) that could predict a difficult transsphenoidal (TS) surgery werenoted. Adverse findings at TS surgery leading to a 2nd stage TC surgery were documented. Eighteen of the 23 cases were giant adenomas. Thirteen patientsunderwent TC surgery alone or as an initial approach when combined with TS while 10underwent 2nd stage TC surgery following a TS approach. Most cases in the first group had 3 or more radiological factors in combination with a small sella. The 2nd group had higher sellar tumor volumes and fewer unfavourable radiological factors that led to the initial use of the TS approach. A hard, fibrous consistency or a significant residue obscured from the surgeon's view, and difficulty in hemostasis were additional factors prompting the use of a TC approach. Tumor excision e"90 % could be achieved in 13 cases (56.5 %). Post-operative RT was administered in 12 patients. There were 2deaths (8.7 %) and the major morbidity rate was 43 %. Despite advances in endoscopic surgery the TC approach may be required in 5 % of cases. A study of the preoperative MRI for factors that predict difficulty with the TS approach might encourage the surgeon to consider a TC surgery either as an initial approach or combined with a TS surgery. © 2012 Springer Science+Business Media New York.

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Intl PMID: 23076713 **CO**

Ranganath, P., Sharma, V., Danda, S., Nandineni, M. R. and Dalal, A. B.

Novel mutations in the neuraminidase-1 (NEU1) gene in two patients of sialidosis inIndiaIndian Journal of Medical Research, Supplement; 2012, 136 (DEC): 1048-1050

Address: Diagnostics Division, Centre for DNA Fingerprinting and Diagnostics, Hyderabad, IndiaMedical Genetics Unit Christian Medical College, Vellore, India

Nat **CO**

Richard, S. A., Black, R. E., Gilman, R. H., Guerrant, R. L., Kang, G., Lanata, C. F., Mølbak, K., Rasmussen, Z. A., Sack, R. B., Valentiner-Branth, P., Checkley, W., Moore,S. R., Lima, A. A. M., Pinkerton, R. C., Aaby, P., Cabrera, L. Z., Bern, C., Sterling, C. R.,Epstein, L. D., Moulton, L., Perch, M., Fischer, T. K., Sommerfelt, H., Steinsland, H. andVerastegui, H.

Wasting is associated with stunting in early childhoodJournal of Nutrition; 2012, 142 (7): 1291-1296

The longitudinal relationship between stunting and wasting in children is poorly characterized. Instances of wasting or poor weight gain may precede linear growth retardation. We analyzed longitudinal anthropometric data for 1599 children from 8 cohort studies to determine the effect of wasting [weight-for-length Z-score (WLZ) <-2] and variability in WLZ in the first 17 mo on length-for-age Z-score (LAZ) at 18-24 mo of age. In addition, we considered the effects of change in WLZ during the previous 6-mo period on length at 18 and 24 mo. Wasting at 6-11 or 12-17 mo was associated with decreased LAZ; however, children who experienced wasting only at 0-5 mo did notsuffer any long-term growth deficits compared with children with no wasting during any period. Children with greater WLZ variability (e"0.5 SD) in the first 17 mo of life wereshorter [LAZ = -0.51 SD (95% CI: -0.67, 20.36 SD)] at 18-24 mo of age than childrenwith WLZ variability <0.5. Change in WLZ in the previous 6-mo period was directly associated with greater attained length at 18 mo [0.33 cm (95% CI: 0.11, 0.54 cm)] and 24 mo [0.72 cm (95% CI: 0.52, 0.92 cm)]. Children with wasting, highly variable WLZ, or negative changes in WLZ are at a higher risk for linear growth retardation, although instances of wasting may not be the primary cause of stunting in developing countries. © 2012 American Society for Nutrition.

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United States University of Arizona, United States Universidad Adolfo Ibanez, ChileCenter of International Health, University of Bergen, Norway

Intl PMID:22623393 CO

Rupa, V., Isaac, R., Manoharan, A., Jalagandeeswaran, R. and Thenmozhi, M.

Risk factors for upper respiratory infection in the first year of life in a birth cohortInternational Journal of Pediatric Otorhinolaryngology; 2012, 76 (12): 1835-1839

Objectives: Despite being one of the commonest causes of morbidity among infants, there are no reliable data on the incidence and risk factors of upper respiratory infection among Indian infants. Accordingly, we aimed to study the incidence and age related prevalence, socio-demographic risk factors and association between upper respiratory infection and nasopharyngeal colonization with Streptococcus pneumoniae in the first year of life among rural Indian infants. Methods: A birth cohort of 210 babies was evaluated monthly with nasopharyngeal swabbing to note the frequency of upper respiratory infection and carriage rate with S. pneumoniae. Data on 11 potential risk factors were noted and subjected to statistical analysis. Results: Upper respiratory infection episodes commenced within a few weeks of life and increased in frequency with age, peaking at 72% in the 9th month. There were 747 episodes of upper respiratory infection overall (6.1 episodes per child-year follow up). The prevalence was maximumin the winter months (65%). There were 3 significant risk factors for upper respiratory infection in the first year of life, i.e., winter season (OR = 1.86; 95% CI = 1.4-3.5),nasopharyngeal colonization with S. pneumoniae (OR = 1.34; 95% CI = 1.1-1.7) andparental occupation (OR = 1.37; 95% CI = 1.1-1.8). The OR were adjusted for other covariates like sex of the child, parents' education, type of house, birth weight, number of family members, passive smoking, use of firewood for cooking and water source. Conclusions: Seasonal predilection in winter, nasopharyngeal colonization with S. pneumoniae and parental occupation (poor socioeconomic status) are the most important risk factors for upper respiratory infection among rural Indian infants. © 2012Elsevier Ireland Ltd.

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Intl PMID:23031180 CO

Samuel, S., Sait, A., Nithyananth, M., Oomen, A. T., Krishnamoorthy, V. P. and Daniel, A. J.

Distraction osteogenesis using monolateral external fixator for post-traumatic skeletal defects of the femurInjury. 2012 Aug 4. pii: S0020-1383(12)00259-8. doi: 10.1016/j.injury.2012.06.031. [Epub ahead of print]

Background: The reconstruction of post-traumatic bone defects of the femur is an infrequently encountered problem. The presence of infection and avascularity of the bone fragments compounds this problem, making its management a major orthopaedicchallenge. Distraction osteogenesis is frequently used for the management of skeletaldefects, especially when infection and deformities co-exist. Though the Ilizarov method is widely used for distraction osteogenesis, the monolateral external fixator has certain advantages such as ease of application, better patient tolerance and a shorter learning curve. Methods: We retrospectively studied the results of treatment of 22 patients with post-traumatic skeletal defects, 17 of which were infected, by distraction osteogenesis using a monolateral rail external fixator. Results: The average femoral defect was 7.1cm and the patients had undergone an average of two failed surgical procedures prior to treatment. Union was achieved in all but one patient at an average of 12.6 months. The average distraction gap was 5.6 cm and 18 patients had less than an inch of residual shortening. A total of 17 patients were free of infection at last follow-up. Bone results as defined by Paley's criteria were excellent in six, good in 10 and fair in three patients. Three patients had a poor bone outcome. The most common obstacle we encountered was the need for bone grafting of the docking site and the most common complication was the persistence of knee stiffness. Conclusion: The monolateral rail external fixator, which has been used to treat a wide variety of conditions, is a viable alternative to the circular fixator for the management of post-traumatic skeletal defects of the femur.

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Intl PMID:22867690 CO

Sellathamby, S., Lakshmi, K. M., Busson, M., Viswabandya, A., George, B., Mathews, V., Chandy, M., Charron, D., Krishnamoorthy, R., Tamouza, R. and Srivastava, A.

Polymorphisms in the Immunoregulatory Genes are Associated with HematopoieticRecovery and Increased Susceptibility to Bacterial Infections in Patients with Thalassaemia Major Undergoing Matched Related Hematopoietic Stem Cell TransplantationBiology of Blood and Marrow Transplantation; 2012, 18 (8): 1219-1226

In this study, the impact of polymorphisms in the genes of proinflammatory (IL-â, TNF- á, IL-6, IFN-ã), anti-inflammatory (transforming growth factor [TGF]-â, IL-10, IL-Ra), and other immunoregulatory factors (FcãRIIa, NOS3) along with the conventional risk factors on the rate of hematopoietic recovery and first episodes of bacterial, viral, or invasive fungal infections in 102 patients with â-thalassaemia major who underwent allogeneic hematopoietic stem cell transplantation (allo-HSCT) with relatively uniform protocols at our center from June 1995 to June 2004 with a minimum follow-up of at least 2 years were studied retrospectively for 180 days after hematopoietic stem cell transplantation (HSCT). Our data show that (1) donor IL-1RN*2/2 (hazard ratio [HR],2.4; 95% confidence interval [CI], 1.17-5.09; P = .018) and FCãRIIA +4481G/G genotypes (HR, 3.1; 95% CI, 1.56-6.31; P = .001) increased the incidence of bacterial infection; (2) fungal infection was increased in recipients with whose donors had IFN-ã+874T/T genotype (HR, 3.8; 95% CI, 1.08-13.62; P = .037); (3) time to neutrophil recovery was shorter in splenectomized patients (HR, 3.1; 95% CI, 1.70-5.64; P <.001), donors without IL-10, -1082A, -819T, and -592A haplotype (HR, 1.6; 95% CI,1.02-2.39; P = .039), and recipients with IFN-ã +874A/A genotype (HR, 1.6; 95% CI, 1.05-2.56; P = .029); and (4) time to platelet recovery was shorter in patients with IL-10, -1082A/A genotype (HR, 1.8; 95% CI, 1.14-2.68; P = .010) and with donors having TNF-á -308G/G genotypes (HR, 1.8; 95% CI, 1.06-2.93; P = .028). These data suggest that outcome after allogeneic stem cell transplantation could be affected by many factors. The mechanisms by which they bring about such impact needs further evaluation. © 2012 American Society for Blood and Marrow Transplantation.

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Intl PMID:22252124 CO

Sivadasan, A., Alexander, M., Patil, A. K., Balagopal, K. and Azad, Z. R.

Fulminant subacute sclerosing panencephalitis in an individual with a perinatallyacquired human immunodeficiency virus infectionArchives of Neurology; 2012, 69 (12): 1644-1647

Background: Case reports of subacute sclerosing panencephalitis (SSPE) in individuals with human immunodeficiency virus (HIV) infection are scarce, and the natural history is unclear. To our knowledge, a fulminant presentation has not yet been described. Objective: To describe a case of fulminant SSPE in an individual with a perinatally acquired HIV infection. Design: Case report and literature review. Setting: Christian Medical College Hospital, Vellore, India. Patient: A 17-year-old boy with a perinatally acquired HIV infection.

Results: The patient presented with subacute-onset cognitive decline and myoclonic jerks with rapid deterioration of health (the patient died within 12 weeks of onset). The findings from magnetic resonance imaging and electroencephalography and the cerebrospinal fluid and serum measles antibody titers were suggestive of SSPE. The fulminant presentation in this case needs to be noted. Conclusions: Along with the better life expectancy of HIV-infected individuals, there may be an increase in the incidence of SSPE in this population. Fulminant SSPE may beadded to the spectrum of measles-associated

neurological disorders in HIV. ©2012American Medical Association. All rights reserved.

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Intl PMID:22944871 CO

Sudeep, K. and Seshadri, M. S.

Extensive prostatic calcification: A visual vignetteJournal of Association of Physicians of India; 2012, 60 (11): 58-59We present a case of prostatic calcification due to alkaptonuria with other clinical features. © JAPI.

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Nat CO

Sureka, J. and Jakkani, R. K.

Clinico-radiological spectrum of bilateral temporal lobe hyperintensity: A retrospective reviewBritish Journal of Radiology; 2012, 85 (1017): e782-e792

Bilateral temporal lobe hyperintensity (BTH) is a commonly encountered MRI finding in a wide spectrum of clinical conditions and often poses a diagnostic challenge to theradiologist. The purpose of this paper is to elucidate several diseases that manifest asBTH on MRI, based on a retrospective review of cranial MRI of 65 cases seen in our institution between October 2007 and September 2010. We found BTH in different clinical scenarios that included infective diseases (herpes simplex virus, congenital cytomegalovirus infection), epileptic syndrome (mesial temporal sclerosis), neurodegenerative disorders (Alzheimer's disease, frontotemporal dementia, Type 1 myotonic dystrophy), neoplastic conditions (gliomatosis cerebri), metabolic disorders (mitochondrial encephalopathy, lactic acidosis and stroke-like episodes, Wilson's disease, hyperammonemia), dysmyelinating disease (megalencephalicleukoencephalopathy with subcortical cysts), and vascular (cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy) and paraneoplastic(limbic encephalitis) disorders. The conventional MRI findings with advanced MRI suchas diffusion-weighted imaging, susceptibility-weighted imaging and MR spectroscopy along with laboratory results are potentially helpful in distinguishing the different clinical conditions and thus affect the early diagnosis and clinical outcome. © 2012 The BritishInstitute of Radiology.

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Intl PMID:22422381 CO

Thomas, N., Rebekah, G., Sridhar, S., Kumar, M., Kuruvilla, K. A. and Jana, A. K.

Can skin temperature replace rectal temperature monitoring in babies undergoingtherapeutic hypothermia in low-resource settings?Acta Paediatrica, International Journal of Paediatrics; 2012, 101 (12): e564-e567

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Intl PMID:23013463 CO

Thomas, V., Thomas, E. and Lionel, J.

Catamenial Pneumothorax: A Rare Phenomenon?Journal of Obstetrics and Gynecology of India; 2012, 1-2 [October 7, 2012] DOI 10.1007/s13224-012-0205-1

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Nat CO

Ueda, P., Tong, L., Viedma, C., Chandy, S. J., Marrone, G., Simon, A. and StålsbyLundborg, C.

Food Marketing towards Children: Brand Logo Recognition, Food-Related Behavior andBMI among 3-13-Year-Olds in a South Indian TownPLoS One; 2012, 7 (10):

Objectives: To assess exposure to marketing of unhealthy food products and its relation to food related behavior and BMI in children aged 3-13, from different socioeconomic backgrounds in a south Indian town. Methods: Child- parent pairs (n = 306) were recruited at pediatric clinics. Exposure to food marketing was assessed by a digital logo recognition test. Children matched 18 logos of unhealthy food (high in fat/sugar/salt) featured in promotion material from the food industry to pictures of corresponding products. Children's nutritional knowledge, food preferences, purchase requests, eating behavior and socioeconomic

characteristics were assessed by a digital game and parental questionnaires. Anthropometric measurements were recorded. Results: Recognition rates for the brand logos ranged from 30% to 80%. Logo recognition ability increased with age (p<0.001) and socioeconomic level (p<0.001 comparing children in the highest and lowest of three socioeconomic groups). Adjusted for gender, age and socioeconomic group, logo recognition was associated with higher BMI (p = 0.022) and nutritional knowledge (p<0.001) but not to unhealthy food preferences or purchase requests. Conclusions: Children from higher socioeconomic groups in the region had higher brand logo recognition ability and are possibly exposed to more food marketing. The study did not lend support to a link between exposure to marketing and poor eating behavior, distorted nutritional knowledge or increased purchase requests. The correlation between logo recognition and BMI warrants further investigation on food marketing towards children and its potential role in the increasing burden of non-communicable diseases in this part of India. © 2012 Ueda et al.

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Intl PMID:23082137 CO

Varkki, S., Tergestina, M., Bhonsle, V. S., Moses, P. D., Mathai, J. and Korula, S.

Isolated Pulmonary Langerhans Cell HistiocytosisIndian J Pediatr. 2012 Sep 23. [Epub ahead of print]

Isolated pulmonary involvement in Langerhans Cell Histiocytosis (LCH) is rare in childhood. The authors report a 6-y- old boy presenting with recurrent pneumothorax,whose CT thorax showed diffuse pulmonary cystic lucencies bilaterally. Biopsy of the lesions confirmed pulmonary LCH with Cd1a and S 100 positivity. © 2012 Dr. K C Chaudhuri Foundation.

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Nat PMID:23001923 CO

Vasan, S. K., Fall, T., Neville, M. J., Antonisamy, B., Fall, C. H., Geethanjali, F. S., Gu, H. F., Raghupathy, P., Samuel, P., Thomas, N., Brismar, K., Ingelsson, E. and Karpe, F.

Associations of variants in FTO and near MC4R with obesity traits in south Asian IndiansObesity; 2012, 20 (11): 2268-2277

Recent genome-wide association studies show that loci in FTO and melanocortin 4 receptor (MC4R) associate with obesity-related traits. Outside Western populations the associations between these variants have not always been consistent and in Indians ithas been suggested that FTO relates to diabetes without an obvious intermediaryobesity phenotype. We investigated the association between genetic variants in FTO (rs9939609) and near MC4R (rs17782313) with obesity- and type 2 diabetes (T2DM)- related traits in a longitudinal birth cohort of 2,151 healthy individuals from the Vellore birth cohort in South India. The FTO locus displayed significant associations with several conventional obesity-related anthropometric traits. The per allele increase is about 1% for BMI, waist circumference (WC), hip circumference (HC), and waist-hip ratio. Consistent associations were observed for adipose tissue-specific measurements such as skinfold thickness reinforcing the association with obesity-related traits. Obesity associations for the MC4R locus were weak or nonsignificant but a signal for height (P <0.001) was observed. The effect on obesity-related traits for FTO was seen in adulthood, but not at younger ages. The loci also showed nominal associations with increased blood glucose but these associations were lost on BMI adjustment. The effect of FTO onobesity-related traits was driven by an urban environmental influence. We conclude that rs9939609 variant in the FTO locus is associated with measures of adiposity andmetabolic consequences in South Indians with an enhanced effect associated with urbanliving. The detection of these associations in Indians is challenging because conventional anthropometric obesity measures work poorly in the Indian thin-fat phenotype.

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Stockholm,SwedenOxford Center for Diabetes, Endocrinology and Metabolism, Oxford, United KingdomDepartment of Biostatistics, Christian Medical College, Vellore, India, MRC Epidemiology Unit, Southampton, United KingdomDepartment of Clinical Biochemistry, Christian Medical College, Vellore, IndiaDepartment of Child Health, Christian Medical College, Vellore, IndiaNIHR Oxford Biomedical Research Centre, ORH Trust, Oxford, United Kingdom

Intl PMID: 22421923 CO

Wong, C. X., John, B., Brooks, A. G., Chandy, S. T., Kuklik, P., Lau, D. H., Sullivan, T., Roberts-Thomson, K. C. and Sanders, P.

Direction-dependent conduction abnormalities in the chronically stretched atriaEuropace; 2012, 14 (7): 954-961

AimsThere is increasing evidence of the role direction-dependent conduction plays in the arrhythmogenic interaction between ectopic triggers and abnormal atrial substrates.We thus sought to characterize direction-dependent conduction in chronically stretchedatria.Methods and resultsTwenty-four patients with chronic atrial stretch due to mitral stenosis and 24 reference patients with left-sided accessory pathways were studied. Multipolar catheters placed at the lateral right atrium, crista terminalis, and coronary sinus (CS) characterized direction-dependent conduction along linear catheters and across the crista terminalis. Bi-atrial electroanatomic maps were created in both sinus rhythm and an alternative wavefront direction by pacing from the distal CS. This allowed an assessment of conduction velocities, electrogram, and voltage characteristics during wavefronts propagating in different directions. While differing wavefront directions caused changes in both chronic atrial stretch and reference patients (P< 0.001 for all), these direction-dependent changes were greater in chronic atrial stretch compared with reference patients, who exhibited greater slowing in conduction velocities (P 0.09), prolongation of bi-atrial activation time (P 0.04), increase in number (P< 0.001) and length (P< 0.001) of lines of conduction block, increase in fractionated electrograms (P<0.001), and decrease in voltage (P 0.08) during left-to-right compared with right-to-left atrial activation. These direction-dependent changes were associated with a greaterpropensity for chronically stretched atria to develop atrial fibrillation (P0.02).ConclusionsAtrial remodelling in chronic atrial stretch exacerbates physiological direction-dependent conduction characteristics. Our data suggest that the greater direction-dependent conduction seen in patients with chronic atrial stretch may promote arrhythmogenesis due to ectopic triggers from the left atrium. Published on behalf of the European Society of Cardiology. All rights reserved. © The Author 2012.2012 © Published on behalf of the European Society of Cardiology. All rights reserved. © The Author 2012.

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Intl PMID: 22308090 CO

Abraham, P.Viral Hepatitis in India
Clinics in Laboratory Medicine; 2012, 32 (2): 159-174

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Intl PMID:22726997 EPH

Albanese, E., Lombardo, F. L., Dangour, A. D., Guerra, M., Acosta, D., Huang, Y., Jacob, K. S., De Rodriguez, J. J. L., Salas, A., Schönborn, C., Sosa, A. L., Williams, J., Prince, M. J.and Ferri, C. P.

No association between fish intake and depression in over 15,000 older adults from seven low and middle income countries-the 10/66 study PLoS One; 2012, 7 (6): Background: Evidence on the association between fish consumption and depression is inconsistent and virtually non-existent from low- and middle-income countries. Using a standard protocol, we aim to assess the association offish consumption and late-life depression in seven low- and middle-income countries. Methodology/Findings: We used cross-sectional data from the 10/66 cohort study and applied two diagnostic criteria for late-life depression to assess the association between categories of weekly fish consumption and depression according to ICD-10 and the EURO-Ddepression symptoms scale scores, adjusting for relevant confounders. All-catchment area surveys were carried out in Cuba, Dominican Republic, Venezuela, Peru, Mexico, China, and India, and over 15,000 community-dwelling older adults (65+) were sampled. UsingPoisson models the adjusted association between categories of fish consumption and ICD-10 depression was positive in India (p for trend = 0.001), inverse in Peru (p = 0.025), and not significant in all other countries. We found a linear inverse association between fish consumption categories and EURO-D scores only in Cuba (p for trend = 0.039) and China (p<0.001); associations were not significant in all other countries. Between-country heterogeneity was marked for both ICD-10 (I2>61%) and EURO-D criteria (I2>66%). Conclusions: The associations of fish consumption with depression in large samples of older adults varied markedly across countries and by depression diagnosis and were explained by socio-demographic and lifestyle variables. Experimental studies in these settings areneeded to confirm our findings. © 2012 Albanese et al.**Address:** Institute of Psychiatry, King's College London, London, United KingdomDepartment of Epidemiology, Italian National Institute of Health, Rome, ItalyDepartment of Nutrition and Public Health Intervention Research, London School of Hygiene and Tropical Medicine, London, United KingdomPsychogeriatric Unit, National Institute of Mental Health Honorio Delgado Hideyo Noguchi, Lima, PeruInternal Medicine Department, Universidad Nacional Pedro Henriquez Ureña (UNPHU),Santo Domingo, Dominican RepublicInstitute of Mental Health, Peking University, Beijing, ChinaChristian Medical College, Vellore, IndiaFacultad de Medicina Finley-Albarran, Medical University of Havana, Havana, CubaFaculty of Medicine, Universidad Central de Venezuela, Caracas, Venezuela National Institute of Neurology and Neurosurgery of Mexico, Mexico City, Mexico Institute of Community Health, Chennai, India

Intl PMID:22723900 EPH

Alexander, A. M., Mohan, V. R., Muliyil, J., Dorny, P. and Rajshekhar, V.

Changes in knowledge and practices related to taeniasis/cysticercosis after health education in a south Indian communityInternational Health; 2012, 4 (3): 164-169

A health education programme for taeniasis/cysticercosis was implemented and evaluated among schoolchildren and the general community in a rural block in southern India, an area that is endemic for cysticercosis. The baseline survey among 831 participants from three randomly selected villages showed poor knowledge regarding the spread of taeniasis and neurocysticercosis. There was also a lack of adequate hygiene and sanitation practices. Health education was given in these villages and in the schools located in these villages regarding the lifecycle of the pork tapeworm, spread of taeniasis and cysticercosis, and prevention of these conditions. The post-intervention test conducted 6 months later among1060 participants revealed a 46% increase in the overall score of knowledge and practices. Awareness about the mode of spread of taeniasis and cysticercosis improved by almost 3 times and the reported practice of washing hands with soap and water before eating improved by 4.8 times and after using the toilet by 3.6 times. One person who reported the passage of tapeworm segments was confirmed to be a carrier of Taenia solium and was treated. The health education

given on prevention of taeniasis and cysticercosis was usefulin improving the knowledge and practices of the community and also in diagnosing taeniasis through self-reporting. © 2012 Royal Society of Tropical Medicine and Hygiene.**Address:** Department of Community Health, Christian Medical College, Vellore, Tamil Nadu, IndiaDepartment of Biomedical Sciences, Institute of Tropical Medicine, Antwerp, BelgiumLaboratory of Parasitology, Faculty of Veterinary Medicine, Ghent University, Belgium Department of Neurological Sciences, Christian Medical College, Vellore 632004, Tamil Nadu, India Academic Officer, Christian Medical College, Vellore, Tamil Nadu, India

Intl EPH

Babji, S. and Kang, G.

Rotavirus vaccination in developing countries Current Opinion in Virology; 2012, 2 (4): 443-448

Although two oral rotavirus vaccines are licensed in many countries, multiple factors may affect decision-making regarding introduction into national immunization programs in developing countries. Financial and logistic challenges to introduction of rotavirus vaccines in countries with limited infrastructure and resources are accompanied by a perceived lack of need and evidence from recent vaccine trials, which demonstrated significantly lower efficacy in high burden countries. Nonetheless, even at a low efficacy, the use of existing vaccines in developing countries is predicted to alleviate considerable rotavirus disease burden and mortality. Potential alternate strategies for improving response to existingvaccines or the development of improved vaccines need to be considered to ensure that the remaining burden of mortality and morbidity can be addressed in the future. © 2012Elsevier B.V.**Address:** Department of Gastrointestinal Sciences, Christian Medical College, Vellore, TamilNadu 632004, India

Intl PMID:22698800 EPH

Basker, M. M., Mathai, S., Korula, S. and Mammen, P. M.

Eating Disorders among Adolescents in a Tertiary Care Centre in IndiaIndian J Pediatr. 2013 Mar;80(3):211-4. doi: 10.1007/s12098-012-0819-4. Epub 2012 Jul14.

Objective: To analyse the clinical profile of eating disorders (ED) among adolescent patients living in India. Methods: This is a descriptive study of a series of seven adolescent patientspresenting to a tertiary care centre with characteristic clinical features of eating disorder.Results: Of the seven adolescents with ED there were 3 boys and 4 girls. Physical examination, psychiatric assessment and investigations confirmed the diagnosis of ED in all seven. Five adolescents were managed with nutritional rehabilitation and family based therapy as inpatients for about 3 wk. One was treated in the outpatient clinic and one was unwilling for treatment. Four patients who had strong family support recovered, 1 had minimal weight gain and 2 were lost to follow up. Conclusions: The characteristic form of adolescent onset ED exists among adolescents living in India. A multidisciplinary approach to treatment is essential for a good outcome. This article was written to sensitize health care professionals, pediatricians in particular about the existence of ED among adolescents living in India and the current acceptable principles of management of this potentially fatal illness. © 2012 Dr. K C Chaudhuri Foundation.**Address:** Department of Pediatrics, Christian Medical College, Vellore, 632004, IndiaChild and Adolescent Psychiatry Unit, Christian Medical College, Vellore, India

Nat PMID:22798272 EPH

Chadha, M. S., Broor, S., Gunasekaran, P., Potdar, V. A., Krishnan, A., Chawla-Sarkar, M., Biswas, D., Abraham, A. M., Jalgaonkar, S. V., Kaur, H., Klimov, A., Lal, R. B., Moen, A., Kant, L. and Mishra, A. C.

Multisite virological influenza surveillance in India: 2004-2008Influenza and other Respiratory Viruses; 2012, 6 (3): 196-203

Background Influenza surveillance is important to identify circulating, emerging/reemerging strains and unusual epidemiological trends. With these objectives, a multisite humaninfluenza surveillance network was initiated in India in 2004. Methods Epidemiologic dataand throat swabs for laboratory testing were collected from patients with influenza-like illness (ILI) and severe acute respiratory infections (SARI). Virus isolation was carried out in Madin-Darby canine kidney cells and strains identified by hemagglutination inhibition assay. Meteorological

data were collected. Results From September 2004 to December 2008, 617 (4·43%) of 13928 cases yielded isolates: 27·8% were influenza A(H1N1), 29·8% were type A(H3N2), and 42·3% were type B. The yearly type and subtype distribution varied significantly from site to site. Peak influenza activity was observed from June to August in Delhi, Pune, and Kolkata and October to December in Chennai. Maximum influenza activity was seen during the rains in Delhi, Pune, Chennai, and Kolkata in correlation with virus isolations. Multivariate analysis of ILI cases showed chill/rigors, cough, fatigue, and ILI in family, correlated positively with isolation. Genetic analysis of Indian isolates revealed that viruses matched with vaccine strains by and large. Overlapping between circulating and vaccine component strains of consecutive years was also observed. Conclusions Seasonal influenza A(H1N1), H3N2, and type B co-circulated in all regions without any particular pattern of movement of any subtype. Year-round limited influenza activity with peaksduring rains was observed. Genetic drifts and varying seasonality in different parts of the country suggest that a staggered timing of vaccination may be appropriate for India.Published 2011. This article is a US Government work and in the public domain in the USA.**Address:** National Institute of Virology, Pune, IndiaAll India Institute of Medical Sciences, New Delhi, IndiaKing Institute of Preventive Medicine and Research, Chennai, India National Institute of Cholera and Enteric Diseases, Kolkata, IndiaRegional Medical Research Centre, Dibrugarh, IndiaChristian Medical College, Vellore, IndiaIndira Gandhi Government Medical College, Nagpur, IndiaIndian Council of Medical Research, New Delhi, IndiaInfluenza Division, Centers for Disease Control and Prevention, Atlanta, GA, United States

Intl PMID:21955356 EPH

Charles, B., Jeyaseelan, L., Pandian, A. K., Sam, A. E., Thenmozhi, M. and Jayaseelan, V.

Association between stigma, depression and quality of life of people living with HIV/AIDS(PLHA) in South India - A community based cross sectional studyBMC Public Health. 2012 Jun 21;12:463. doi: 10.1186/1471-2458-12-463.

Background: India has around 2.27 million adults living with HIV/AIDS who face several challenges in the medical management of their disease. Stigma, discrimination and psychosocial issues are prevalent. The objective of the study was to determine the prevalence of severe stigma and to study the association between this, depression and the quality of life (QOL) of people living with HIV/AIDS (PLHA) in Tamil Nadu. Methods: This was a community based cross sectional study carried out in seven districts of Tamil Nadu, India, among 400 PLHA in the year 2009. The following scales were used for stigma,depression and quality of life, Berger scale, Major Depression Inventory (MDI) scale and the WHO BREF scale. Both Stigma and QOL were classified as none, moderate or severe/poor based on the tertile cut off values of the scale scores. Depression was classified as none,mild, moderate and severe. Logistic regression analyses were performed to study the riskfactors. Results: Twenty seven per cent of PLHA had experienced severe forms of stigma. These were severe forms of personalized stigma (28.8%), negative self-image (30.3%), perceived public attitude (18.2%) and disclosure concerns (26%). PLHA experiencing severe depression were 12% and those experiencing poor quality of life were 34%. Poor QOL reported in the physical, psychological, social and environmental domains was 42.5%,40%, 51.2% and 34% respectively. PLHA who had severe personalized stigma and negative self-image had 3.4 (1.6-7.0) and 2.1 (1.0-4.1) times higher risk of severe depression respectively ($p<.001$). PLHA who had severe depression had experienced 2.7 (1.1-7.7)times significantly poorer QOL. Conclusions: Severe forms of stigma were equivalently prevalent among all the categories of PLHA. However, PLHA who had experienced severe depression had only developed poor QOL. A high level of social support was associated with a high level of QOL. **Address:** AIDS Prevention and Control Project, Voluntary Health Services, Adyar, Chennai,600 113, IndiaDepartment of Bio-Statistics, Christian Medical College and Hospital, Vellore, IndiaUSAID, New Delhi, India

Intl PMID:22720691 EPH

Charu, S., Amita, R., Sujoy, R. and Thomas, G. A.'
Menstrual characteristics' and 'prevalence and effects of dysmenorrhea' on quality of life of medical studentsInternational Journal of Collaborative Research on Internal Medicine and Public Health;2012, 4 (4): 276-294

Background: A common gynecological problem encountered among female medical students is dysmenorrhea, which also appears to be a leading cause of absenteeism from college. Hence arises a need to evaluate the menstrual characteristics, prevalence of dysmenorrhoea and its effect on daily routine activities and quality of life of medical students. Aims: This is a cross sectional descriptive study, conducted on 560 female medical students with the objectives to evaluate the menstrual characteristics, prevalence and severity of dysmenorrhoea and its effects on the quality of life, particularlyabsenteeism from college. Methods: Three medical colleges in Mangalore (Karnataka, India)provided the setting of our study. These were representative of a cosmopolitan nature of the study population. A total of 560 students were interviewed by the investigators. Allparticipants were given a preformed questionnaire to complete. Besides menstrualcharacteristics the questionnaire included gradation of pain and quality of life based on the American Chronic Pain Association (ACPA) which was modified according to needs of our study. Chi-square test and logistic regression were used for statistical analyses. Results: The average age of the participants was 20.57 years +/- 1.208 years (ranging from 17-24 years). The mean BMI of the participants was 21.69 +/-3.27 kg/m 2 (ranging from 14.7 kg/m 2 to 33.54kg/m 2). The average age of menarche was 12.67+/-1.10years, (9 to 16 years). The average menstrual cycle duration of the participants in the study group was29.52+/-3.37days. 97.2%(533), family history of dysmenorrhea was present in 40% participants (n=560). Of the total, 86.96% (487) participants reported to have physical premenstrual symptoms and 55.71% (312) reported to have psychological premenstrual symptom. There is a significant association between Quality of Life and severity of dysmenorrhea. Conclusion: Our study shows a significant association of dysmenorrhoea with the age of menarche, family history and both physical and psychological premenstrual symptoms. Although there was an association of dysmenorrhoea with chronological age, BMI and cycle length, these associations were not found to be statistically significant. The most significant conclusion of our study was found to be high prevalence of dysmenorrhoea,having a significant effect on the routine activities and a detrimental effect on the quality oflife. The alarming prevalence of self-medication in the form of NSAID's, easily available over the counter was also highlighted in our study.**Address:** Fr Muller Medical College, Karnataka, IndiaDept of Obstetrics and Gynecology, Fr Muller Medical College, Karnataka, IndiaKasturba Medical College, Manipal, Karnataka, IndiaSenior Research Fellow, South Asian Cochrane Network and Center, Christian MedicalCollege, Vellore, India

Intl EPH

Devadason, P., John, K. R. and Suganthi, P.
Direct observation pattern of Dots (Directly Observed Treatment Short course) by AlternateDOTS providers for patients treated under RNTCP in a tertiary care hospitalIndian Journal of Public Health Research and Development; 2012, 3 (2): 131-134

Direct Observation of Treatment Short course (DOTS) is the proven effective in controlling TB on a mass basis around the world. Direct observation is the central and key element for the success of the DOTS strategy. In India, Multi-purpose health workers play a major rolein treatment observation; where they are not available, treatment observation is done bycommunity volunteers including anganwadi workers, traditional dais, and community and religious leaders. The choice of DOTS provider should be based on access, patient preference and availability of the DOTS providers. This study was done to find the pattern of the direct observation component of the DOTS strategy by the professional and community DOTS providers and to find out their acceptance among the patients. Material and Method 164 new sputum positive patients treated at rural and urban TB clinics of CMC Vellore from January 2001 to December 2004 were followed up during November 2005 along with their respective DOTS providers using separate structured questionnaires. Thedata entry and statistical analysis was done using SPSS data analysis package version 12.0. Chi2 test and t- test were used

to test the significance of the data. Result Intensive Phase(IP) treatment was given alternate days by 94.5% of the community providers compared to 90.1% of professional providers. In Continuation Phase (CP) treatment, it was not expected by the RNTCP guidelines to give alternate days. But 34.2% of community providers hadgiven on alternate days as in IP compared to only 4.4% of professional providers. Thedifference is statistically significant (p value <0.001). Patients observed by professional providers had to travel the mean distance of 0.91 Km compared to only 0.31 km with community providers (p value <0.001). The average time spent each time to get drugs from their providers in the professional arm is 27.42 minutes compared to only 14.86 minutes with community providers (p value <0.001). In the professional arm the mainplace was clinics/hospitals (90.1%) and in the community arm mainly either it was patients' house (452%) or providers' house (41.1%). In the professional arm, the patients are cumulated in the working hours of the professional providers and they are evenlydistributed regarding time in the community arm. Conclusion The DOTS being provided athome with less consumption of time and lesser distance to travel are significantly different in the community arm of DOTS providers as compared to the professional DOTS providers. **Address:** Department of Community Medicine, SMIMS, Kulasekharam, T.N, India Department of Community Medicine, Christian Medical College, Vellore, T.N, India

Nat EPH

Duba, A. S., Rajkumar, A. P., Prince, M. and Jacob, K. S.
Determinants of disability among the elderly population in a rural south Indian community: The need to study local issues and contextsInternational Psychogeriatrics; 2012, 24 (2): 333-341

Background: Disability among the elderly is a cause of significant burden. There is dearth of relevant research from low-and middle-income countries. We aimed to establish the natureand factors associated with disability among the elderly in a rural south Indian community.Methods: We recruited 1000 participants aged over 65 years from Kaniyambadi block, Vellore, India. We assessed their disability status, sociodemographic profile, psychiatric morbidity, cognitive functioning and anthropometrics using the following structured instruments: WHO Disability Assessment Scale II, Geriatric Mental State, Community Screening Instrument for Dementia, and Neuropsychiatric Inventory. We employed appropriate multivariate statistics to study the factors associated with a higher level of disability and to determine the population attributable fractions for various modifiable risk factors. Results: Advanced age, illiteracy, hunger, poor nutrition, arthritis, hearing impairment, gastro-intestinal and respiratory diseases, dementia and travel costs to primary health facilities increased the risk of disability significantly. Hypertension, diabetes and depression were not associated with disability. Modifiable social determinants and medical diseases together contributed to disability in this population. Conclusion: Locally relevant social determinants combine with prevalent medical diseases to produce the disability burden among elderly. There is a need to focus on local contexts and modifiable risk factors to design locally appropriate public health policies and interventions. © 2011International Psychogeriatric Association.**Address:** Department of Psychiatry, Christian Medical College, Vellore-632002, Tamil Nadu, IndiaInstitute of Psychiatry, London, United Kingdom

Intl PMID:21933464 EPH

Estívariz, C. F., Jafari, H., Sutter, R. W., John, T. J., Jain, V., Agarwal, A., Verma, H., Pallansch, M. A., Singh, A. P., Guirguis, S., Awale, J., Burton, A., Bahl, S., Chatterjee, A.and Aylward, R. B.
Immunogenicity of supplemental doses of poliovirus vaccine for children aged 6-9 months in Moradabad, India: A community-based, randomised controlled trialThe Lancet Infectious Diseases; 2012, 12 (2): 128-135

Background: The continued presence of polio in northern India poses challenges to the interruption of wild poliovirus transmission and the management of poliovirus risks in the post-eradication era. We aimed to assess the current immunity profile after routine doses of trivalent oral poliovirus vaccine (OPV) and numerous supplemental doses of type-1 monovalent OPV (mOPV1), and compared the effect of five vaccine formulations and dosages on residual immunity gaps. Methods: We did a community-based, randomised controlled trial of healthy infants aged 6-9 months at ten sites in Moradabad, India. Serum neutralising antibody was measured before infants were randomly

assigned to a studygroup and given standard-potency or higher-potency mOPV1, intradermal fractional-dose inactivated poliovirus vaccine (IPV, GlaxoSmithKline), or intramuscular full-dose IPV from two different manufacturers (GlaxoSmithKline or Panacea). Follow-up sera were taken at days 7 and 28. Our primary endpoint was an increase of more than four times in antibody titres. We did analyses by per-protocol in children with a blood sample available before, and 28 days after, receiving study vaccine (or who completed study procedures). This trial is registered with Current Controlled Trials, number ISRCTN90744784. Findings: Of 1002children enrolled, 869 (87%) completed study procedures (ie, blood sample available at day0 and day 28). At baseline, 862 (99%), 625 (72%), and 418 (48%) had detectable antibodies to poliovirus types 1, 2, and 3, respectively. In children who were type-1 seropositive, an increase of more than four times in antibody titre was detected 28 days after they were given standard-potency mOPV1 (5/13 [38%]), higher-potency mOPV1 (6/21 [29%]), intradermal IPV (9/16 [56%]), GlaxoSmithKline intramuscular IPV (19/22 [86%]), and Panacea intramuscular IPV (11/13 [85%]). In those who were type-2seronegative, 42 (100%) of 42 seroconverted after GlaxoSmithKline intramuscular IPV, and24 (59%) of 41 after intradermal IPV (p<0·0001). 87 (90%) of 97 infants who were type-3 seronegative seroconverted after intramuscular IPV, and 21 (36%) of 49 after intradermal IPV (p<0·0001). Interpretation: Supplemental mOPV1 resulted in almost total seroprevalence against poliovirus type 1, which is consistent with recent absence of poliomyelitis cases; whereas seroprevalence against types 2 and 3 was expected for routine vaccination histories. The immunogenicity of IPV produced in India (Panacea) was similar to that of an internationally manufactured IPV (GSK). Intradermal IPV was less immunogenic. Funding: Global Alliance for Vaccines and Immunization (GAVI), WHO. © 2012 Elsevier Ltd. **Address:** Global Immunization Division, Centers for Disease Control and Prevention, Atlanta, GA, United StatesNational Polio Surveillance Project, RK Khanna Stadium, New Delhi, IndiaWHO, Geneva, SwitzerlandDepartment of Clinical Virology, Christian Medical College, Tamil Nadu, IndiaNational Polio Surveillance Project, Central Police Hospital, Moradabad, Uttar Pradesh, IndiaPanacea Biotec Ltd, Mohan Co-op, New Delhi, IndiaUNICEF, New Delhi, IndiaChild Survival Collaborations and Resource Group (CORE), CORE India Consortium, Haryana, India

Intl PMID:22071249 EPH

Gopichandran, V., Lyndon, S., Angel, M. K., Manayalil, B. P., Blessy, K. R., Alex, R. G., Kumaran, V. and Balraj, V.
Diabetes self-care activities: A community-based survey in urban southern IndiaNational Medical Journal of India; 2012, 25 (1): 14-17

Background. Diabetes is a lifestyle disease and can be successfully managed by good self- care activities such as diet, exercise, monitoring and drug adherence. Adequate baseline information about the prevalence of good self-care activities is not available from India. We aimed to estimate the existing self-care behaviours and factors influencing thesebehaviours among adult patients with type 2 diabetes in urban southern India. Methods. Across-sectional survey was conducted using a cluster design in an urban community in southern India. The Summary Diabetes Self-Care Activities questionnaire was used to collect information on diet, exercise, monitoring of blood sugars and adherence to drugs. Risk factors such as marital status, socioeconomic status, depression, benefit-finding andduration of illness, which are likely to influence self-care behaviour, were assessed. Results. Good dietary behaviour was present in 29% (95% CI 20.8%-37.2%), good exercise behaviour in 19.5% (95% CI 17.4%-21.6%), regular blood sugar monitoring in 70% (95% CI 62.2%-77.8%) and drug adherence in 79.8% (95% CI 75.1%-84.5%). Being male (OR3.38; 95% CI 1.541-7.407) and married (OR 5.60; 95% CI 1.242-25.212) significantly favoured good exercise behaviour. Being married (OR 2.322; 95% CI 1.104-4.883) andbelonging to the higher socioeconomic status (OR 2.713; 95% CI 1.419-5.190) weresignificantly associated with monitoring of blood sugars. Conclusions. Self-care activities with respect to diet and exercise are poor in the population studied. The self-care activities relating to blood sugar monitoring and drug adherence are good. Improving self-care behaviour among patients with diabetes in India should start with adequate targeted health education. © The National Medical Journal of India 2012.**Address:** Christian Medical College, Department

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Nat PMID:22680314 EPH

Haggar, A., Nerlich, A., Kumar, R., Abraham, V. J., Brahmadathan, K. N., Ray, P., Dhanda, V., Joshua, J. M. J., Mehra, N., Bergmann, R., Chhatwal, G. S. and Norrby-Teglund, A.

Clinical and microbiologic characteristics of invasive Streptococcus pyogenes infections in north and south IndiaJournal of Clinical Microbiology; 2012, 50 (5): 1626-1631

The lack of epidemiologic data on invasive Streptococcus pyogenes infections in many developing countries is concerning, as S. pyogenes infections are commonly endemic in these areas. Here we present the results of the first prospective surveillance study ofinvasive Streptococcus pyogenes infections in India. Fifty-four patients with invasive S.pyogenes infections were prospectively enrolled at two study sites, one in the north and one in the south of India. Sterile-site isolates were collected, and clinical information was documented using a standardized questionnaire. Available acute-phase sera were tested for their ability to inhibit superantigens produced by the patient's own isolate using a cell-based neutralizing assay. The most common clinical presentations were bacteremia without focus (30%), pneumonia (28%), and cellulitis (17%). Only two cases of streptococcal toxic shock syndrome and no cases of necrotizing fasciitis were identified. Characterization of theisolates revealed great heterogeneity, with 32 different emm subtypes and 29 differentsuperantigen gene profiles being represented among the 49 sterile-site isolates. Analyses of acute-phase sera showed that only 20% of the cases in the north cohort had superantigen-neutralizing activity in their sera, whereas 50% of the cases from the south site had neutralizing activity. The results demonstrate that there are important differences in both clinical presentation and strain characteristics between invasive S. pyogenes infections in India and invasive S. pyogenes infections in Western countries. The findings underscore the importance of epidemiologic studies on streptococcal infections in India and have direct implications for current vaccine developments. Copyright © 2012, American Society for Microbiology. All Rights Reserved.**Address:** Center for Infectious Medicine, Karolinska Institutet, Stockholm, SwedenHelmholtz Centre for Infection Research, Braunschweig, GermanySchool of Public Health, Postgraduate Institute of Medical Education and Research, Chandigarh, IndiaDepartment of Community Health, Christian Medical College, Vellore, IndiaDepartment of Microbiology Christian Medical College, Vellore, IndiaDepartment of Transplant Immunology and Immunogenetics, All Indian Institute of MedicalSciences, New Delhi, India

Intl PMID:22357508 EPH

Jha, A., Sadhukhan, S. K., Velusamy, S., Banerjee, G., Banerjee, A., Saha, A. and Talukdar, S.

Exploring the quality of life (QOL) in the Indian software industry: A public health viewpointInternational Journal of Public Health; 2012, 57 (2): 371-381

Objectives Our objectives were to describe the QOL and its determinants among software professionals of Kolkata, and to compare the same according to information technology (IT) and IT-enabled services (ITeS) sub-sectors. Methods An institution-based cross-sectional study was conducted among software professionals of Kolkata applying a two-stage stratified random sampling technique. The WHO QOL BREF questionnaire was administered along with a list of pertinent variables. Results Overall, the analysis for 338 software professionals (177 IT and 161 ITeS) clearly demonstrated significant differences between mean scores of these two sectors for each of the six outcome domains of WHO QOL BREF. Multilevel multivariate analysis outlined 13 significant predictors of QOL-four positive (age, regular fitness regimes, foreign placements and changing companies frequently) and the rest of the nine, negative (multiple sex partners, multiple addictions, extended working hours, night-shift duties, income, expenditure, carrying office work home, current illness and ITeS company type). Conclusions Our study helps in obtaining a clear understanding of the multifaceted risk factors prevailing in this sector, the majority of which can beeffectively addressed by specific health promotional interventions. A dedicated health policy is mandated at both government and company levels. © Swiss School of Public Health2011.**Address:** Division of Epidemiology and Communicable Diseases, Indian Council of

MedicalResearch (ICMR) Headquarters, New Delhi, IndiaDepartment of Public Health Administration, All India Institute of Hygiene and Public Health, Kolkata, IndiaDepartment of Biostatistics, Christian Medical College, Vellore, IndiaJalpaiguri District Hospital, Jalpaiguri, West Bengal, IndiaKolkata Municipal Corporation, Kolkata, IndiaWest Bengal Public Health and Administrative Service, Bardhaman, West Bengal, IndiaAll India Institute of Hygiene and Public Health, Kolkata, India

Intl PMID:21901333 EPH

Kahn, G., Fitzwater, S., Tate, J., Kang, G., Ganguly, N., Nair, G., Steele, D., Arora, R., Chawlasarkar, M., Parashar, U. and Santosham, M.

Epidemiology and prospects for prevention of rotavirus disease in IndiaIndian Pediatrics; 2012, 49 (6): 467-474

Context: With rotavirus vaccines now available globally, it will be useful to assemble the available evidence on the epidemiology and burden of rotavirus gastroenteritis in India, inorder to weigh the urgency of introducing a vaccine to help control rotavirus disease.Evidence Acquisition: We reviewed published studies on rotavirus infection and genotype distribution in India, as well as safety and immunogenicity studies of currently available vaccines. PubMed was searched for papers published after 1990, and several authors who are experts in the field recommended papers of known significance. Results: Rotavirus accounts for close to 40% of hospitalizations for diarrhea in India, with more recent studies showing an increased proportion compared with older studies. There is substantial serotype diversity in India, although there is less intra-country variation than previously thought.Two genotypes, G1P[8] and G2P[4], account for roughly 50% of symptomatic infections in non-neonates. Currently licensed vaccines are safe, and although the efficacy appears lower in developing countries, given the extremely high incidence of diarrhea these could still be cost-effective interventions. Conclusions: The epidemiology and burden of rotavirusdiarrhea is fairly well characterized in India. Introducing rotavirus vaccine into the UIP, along with adequate surveillance, should be an important part of efforts to reduce diarrhea mortality, the third leading cause of death among Indian children, and achieve the country's MDG goals.**Address:** Department of International Health, Johns Hopkins University, Baltimore, UnitedStatesDivision of Viral Diseases, Centers for Disease Control and Prevention, Atlanta, UnitedStatesDepartment of Gastrointestinal Sciences, Christian Medical College, Vellore, IndiaTranslational Health Science and Technology Institute, New Delhi, India National Institute of Cholera and Enteric Diseases, Kolkata, India Rotavirus Vaccine Program, PATH, Seattle, United StatesDivision of Epidemiology and Communicable Diseases, Indian Council of Medical Research, New Delhi, India

Nat PMID:22796685 EPH

Han, Y., Ung, N. M., Bold, L., Win, U. M., Srivastava, R., Meyer, J., Farrukh, S., Rodriguez, L., Kuo, M., Lee, J. C. L., Kumara, A., Lee, C. C., Krisanachinda, A., Nguyen, X. C. and Ng,K. H.

Medical physics aspects of cancer care in the Asia Pacific region: 2011 survey resultsBiomedical Imaging and Intervention Journal; 2012, 8 (2): 1-11

Background: Medical physicists are essential members of the radiation oncology team.Given the increasing complexity of radiotherapy delivery, it is important to ensure adequate training and staffing. The aim of the present study was to update a similar survey from2008 and assess the situation of medical physicists in the large and diverse Asia Pacificregion. Methods: Between March and July 2011, a survey on profession and practice of radiation oncology medical physicists (ROMPs) in the Asia Pacific region was performed. The survey was sent to senior physicists in 22 countries. Replies were received from countries that collectively represent more than half of the world's population. The survey questions explored five areas: education, staffing, work patterns including research and teaching, resources available, and job satisfaction. Results and discussion: Compared to a data froma similar survey conducted three years ago, the number of medical physicists inparticipating countries increased by 29% on average. This increase is similar to the increase in the number of linear accelerators, showing that previously identified staff shortages have yet to be substantially addressed. This is also highlighted by the fact that most ROMPs are expected to work overtime often and without adequate

compensation. While job satisfaction has stayed similar compared to the previous survey, expectations for education and training have increased somewhat. This is in line with a trend towards certification of ROMPs. Conclusion: As organisations such as the International Labour Organization (ILO) start to recognise medical physics as a profession, it is evident that despite some encouraging signs there is still a lot of work required towards establishing an adequately trained andresourced medical physics workforce in the Asia Pacific region. © 2012 Biomedical Imaging and Intervention Journal.**Address:** Physical Sciences, Peter MacCallum Cancer Centre, RMIT University, Melbourne, AustraliaDepartment of Medical Physics and Biomedical Engineering, Gono Bishwabidyalay(University), Savar, Dhaka, BangladeshRadiation Safety and Quality Unit, Department of Scientific Services, Ministry of Health, Brunei DarussalamDepartment of Clinical Oncology, Prince of Wales Hospital, Hong Kong, ChinaDepartment of Radiation Oncology, Christian Medical College, Vellore, IndiaPhysics Department, University of Indonesia, Jakarta, IndonesiaOsaka University, Onoharahigashi 6-35-7, Minoh-city, Japan Sungkyunkwan University, Samsung Medical Centre, South Korea Clinical Oncology Unit, University of Malaya, Kuala Lumpur, MalaysiaRadiotherapy Department, National Cancer Centre, Ulaanbaatar, Mongolia, Ministry of Health, Yangoon, MyanmarB.P. Koirala Memorial Cancer Hospital, Bharatpur, Chitwan, NepalDepartment of Physics and Astronomy, University of Canterbury, Christchurch, NewZealandDepartment of Radiation Oncology, Atomic Energy Medical Centre, Karachi, PakistanDepartment of Radiotherapy, Jose R. Reyes Memorial Medical Center, Manila, Philippines Department of Radiation Oncology, Cancer Institute (Hospital), Chinese Academy of Medical Sciences, ChinaDepartment of Therapeutic Radiology, National Cancer Centre, SingaporeDivision of Medical Physics, National Cancer Institute, Sri LankaDepartment of Medical Imaging and Radiological Sciences, Chang Gung University, Taiwan Department of Radiology, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand K Hospital, National Cancer Institute, Hanoi, Viet NamDepartment of Biomedical Imaging, University of Malaya Medical Center, Kuala Lumpur, Malaysia

PMID:22970066 **EPH**

Makharia, G. K., Ramakrishna, B. S., Abraham, P., Choudhuri, G., Misra, S. P., Ahuja, V., Bhatia, S. J., Bhasin, D. K., Dadhich, S., Dhali, G. K., Desai, D. C., Ghoshal, U. C.,Goswami, B. D., Issar, S. K., Jain, A. K., Jayanthi, V., Loganathan, G., Pai, C. G., Puri, A. S., Rana, S. S., Ray, G., Singh, S. P. and Sood,

A. Survey of inflammatory bowel diseases in IndiaIndian Journal of Gastroenterology; 2012, 31 (6): 299-306

Introduction: Inflammatory bowel disease (IBD), both ulcerative colitis (UC) and Crohn's disease (CD), once thought to be uncommon, is now seen commonly in India. The IndianSociety of Gastroenterology (ISG) Task Force on IBD decided to collate data on the clinical spectrum of IBD currently prevailing in India. Methods: An open call to members of ISG was given through publication of a proforma questionnaire in the Indian Journal of Gastroenterology and the web portal of ISG. The proforma contained questions related with demographic features, family history, risk factors, clinical manifestations andcharacteristics, course of disease, and pattern of treatment of IBD. Results: Of 1,255 filled questionnaires received, 96 were rejected and 1,159 (92. 3 %) were analyzed. Thiscomprised data on 745 (64.3 %) patients with UC, 409 (35.3 %) with CD, and 5 withindeterminate colitis. The median duration of illness was longer in patients with CD (48 months) compared to those with UC (24 months) (p = 0.002). More than one half of patients (UC 51.6 %, CD 56.9 %) had one or more extraintestinal symptoms. A definite family history of IBD was present in 2.9 % (UC 2.3 % and CD 4.6 %; p = 0.12). The extent of disease in UC was pancolitis 42.8 %, left-sided colitis 38.8 %, and proctitis alone in 18.3%. The extent of disease involvement in CD was both small and large intestine in 39.6 %, colon alone in 31.4 % and small intestine alone in 28.9 %. Stricturing and fistulizing disease were noted in 18.8 % and 4.4 % of patients with CD respectively. Chronic continuous and intermittent disease course were present in 35.5 % and 47.2 % of UC patients respectively, and in 23.1 % and 68.8 % of CD patients. Four percent of patients with UC had undergone colectomy, while 15.2 % of patients with CD underwent surgical intervention. Conclusions: The present survey provides a reasonable picture of the demographic features and clinical manifestations of Indian patients with IBD, their risk factors, course of disease, and the treatment given to them. © 2012 Indian Society ofGastroenterology.**Address:** All India Institute

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Nat PMID:23073755 EPH

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Prevalence of metabolic syndrome in women with polycystic ovary syndrome attending aninfertility clinic in a tertiary care hospital in south IndiaJournal of Human Reproductive Sciences; 2012, 5 (1): 26-31

Objective: The aim of the present study was to evaluate the prevalence of metabolic syndrome in women with polycystic ovary syndrome (PCOS). Setting: Infertility clinic in a tertiary care hospital. Study Design: A prospective cross-sectional study. Materials and Methods: All the women attending the infertility clinic categorized as polycystic ovary syndrome according to Rotterdam criteria (2003) during the study period were included in the study. The women with PCOS underwent screening for metabolic syndrome as defined by the modified American Heart Association/ National Heart Lung Blood Institute (AHA/NHLBI) modified ATP 111 (2005) definition. A multivariate logistic regression analysis was applied and significant predictors identified for the prediction of metabolic syndrome. Results: The overall prevalence of metabolic syndrome according to the modified AHA/NHLBI ATP III (2005) criteria was 37.5%. A total of 5.8 % cases were detected tohave diabetes mellitus, 8.3% had impaired fasting glucose, and 11.7 % had an impaired glucose test. Dyslipidemia was present in 93.3% cases of PCOS. Among all the risk factors, age and waist hip ratio 0.85 were strongly associated with the presence of metabolic syndrome. Conclusion: Infertile women with PCOS, particularly those with age 25 years or with central obesity (a waist hip ratio of 0.85), are at a higher risk of developing metabolic syndrome and should be offered screening tests.**Address:** Reproductive Medicine Unit, Christian Medical College, Vellore - 632 004, IndiaDepartment of Biochemistry, Christian Medical College, Vellore, India

Intl PMID:22870011 EPH

Nair, M. K. C. and Russell, P. S.

Adolescent health care in india: Progressive, regressive or at the cross-roads? Indian Journal of Pediatrics; 2012, 79 (SUPPL. 1): S1-S5

India has a sizeable adolescent population. Adolescents constitute a vulnerable populationfor both mental and physical illnesses, and yet their health-care needs and delivery systems are neither well defined nor developed. Many of the mental, reproductive and nutritional health needs of this population are required to be addressed and can be addressed in the primary-care pediatric setting itself if the current system of health-care can be re-organized. This restructuring will be more effective for this population if adolescent friendly approaches, public-private partnership and policy as well as sectoral linkage between the NRHM and other national programs are achieved. The health program for this age group should have promotive and preventive as well as remedial and curative components. Also, improving the availability of trained personnel in these areas of health, culturally sensitive evidence based approaches and capacity building in the primary-care approach is essential to ensure the viability of adolescent health-care in this country. © Dr. K C ChaudhuriFoundation 2011.**Address:** Child Development Centre, Medical College, Thiruvananthapuram 695 011 Kerala, IndiaChild and Adolescent Psychiatry Unit, Christian Medical College, Vellore, India

Nat PMID:21611714 EPH

Nair, M. K. C., Chacko, D. S., Darwin, M. R., Padma, K., George, B. and Russell, P. S.

Menstrual disorders and menstrual hygiene practices in higher secondary school girlsIndian Journal of Pediatrics; 2012, 79 (SUPPL. 1): S74-S78

Objective To study the menstrual problems and menstrual hygiene practices of adolescent girls in Thiruvananthapuram City Corporation. Methods Students of class XI and XII in theage group 15-19 years, belonging to ten Higher Secondary Schools within theThiruvananthapuram City Corporation area were selected for the study by multistage sampling procedure and screened using a pretested self evaluation questionnaire. Results Menstrual disorders were reported in 21.1%. The most frequently reported problem during menstruation was dysmenorrhoea (72.4%) followed by oligomenorrhoea (11.3%). Only11.5% of the girls who had menstrual problems sought treatment and majority from a gynecologist. Out of 81.5% girls who reported vaginal discharge, only 5.7% had abnormaldischarge. Menstrual hygiene was adequate in the majority of girls. Conclusions Menstrualdisorders are common in adolescence and can have significant consequences on future reproductive health. © Dr. K C Chaudhuri Foundation 2011.**Address:** Child Development Centre, Medical College, Thiruvananthapuram 695011 Kerala, IndiaChild and Adolescent Psychiatry Unit, Department of Psychiatry, Christian Medical College, Vellore, Tamil Nadu, India

Nat PMID:21625846 EPH

Nair, M. K. C., Chacko, D. S., Indira, M. S., Siju, K. E., George, B. and Russell, P. S.

A primary care approach for adolescent care and counseling servicesIndian Journal of Pediatrics; 2012, 79 (SUPPL. 1): S79-S83

Objective Adolescents can have mental, emotional, and behavior problems that are a source of stress for the child as well as the family, school and community. These may disrupt the adolescent's ability to function normally. Adolescents also have reproductiveconcerns especially at menarche. Considering the extent of problems of adolescents and the lack of adolescent care and counseling services, it was felt that community adolescent carecounseling services should be made available. This article describes the steps involved inthe setting up of Taluk model of adolescent care and counseling services. Methods Following steps were involved in setting up a Taluk model of adolescent care counseling service delivery system. Step I: Focus Group Discussions (FGDs) among Stakeholders. Step II: Conceptualization and Strategy planning for service delivery. III: Finalization of service delivery model Step IV:Workshops for finalization of TSQ-T 2008 version the tool to be used for assessing the adolescents in the ARSH clinics. Step V: Training Programme forMedical/ Paramedical health staff. Step VI: Awareness programs for mothers of adolescents. Step VII: Setting up of ACS/ ARSH clinics at Taluk hospitals. Step VIII: Evaluation of the utilization of services at Taluk hospitals. The clinic has been well utilized with 1,588 adolescents being seen in 2 years. © Dr. K C Chaudhuri Foundation 2011.**Address:** Child Development Centre, Medical College, Thiruvananthapuram 695011 Kerala, IndiaChild and Adolescent Psychiatry Unit, Department of Psychiatry, Christian Medical College, Vellore, Tamil Nadu, India

Nat PMID:21617908 EPH

Nair, M. K. C., Leena, M. L., George, B., Kasthuri, N., Chandramohan, K. and Russell, P. S.

School based adolescent care services: A district modelIndian Journal of Pediatrics; 2012, 79 (SUPPL. 1): S11-S18

Objective To study the perceived problems of higher secondary school students in a district and to document the effect of a family life and life skill education package. Methods Asurvey was conducted among 11501 adolescents belonging to 103 higher secondary schools in Thiruvananthapuram district, using Teenage Screening Questionnaire-Trivandrum (TSQ-T). Family life and life skill education package was given to class XI students and post intervention evaluation of improvement in knowledge level was assessed after 6 months bya structured pre-tested self-administered questionnaire. Results 61.2% adolescents reported scholastic problem, 22.1% family related problems, 31.9% personal problems and15.2% adjustment problems, with boys reporting higher percentage. 65.8% reported body image related problems, 26.4% had dental, 21.3% ENT and 16.2% had dermatologicalcomplaints. Among girls 50.2% reported menstrual problems. 506 adolescents volunteeredfor

medical check-up and 1247 for detailed psychological assessment. Family life and life skill education package showed consistent improvement in knowledge even after a gap of 6 months. Conclusions The study results showed that a school based adolescent care service programme is effective and feasible. © Dr. K C Chaudhuri Foundation 2011.**Address:** Child Development Centre, Medical College, Thiruvananthapuram 695011 Kerala, IndiaChild and Adolescent Psychiatry Unit, Department of Psychiatry, Christian Medical College, Vellore, Tamil Nadu, India

Nat PMID:21614607 EPH

Nair, M. K. C., Leena, M. L., George, B., Sunitha, R. M., Prasanna, G. L. and Russell, P. S.

A panchayat level primary-care approach for adolescent servicesIndian Journal of Pediatrics; 2012, 79 (SUPPL. 1): S6-S10

Objective To develop a model for providing community adolescent care services in the primary care setting Methods Need assessment was done among adolescents and perceived problems of adolescents were studied using qualitative and quantitative methods. Based on the results of these studies, a Family Life Education (FLE) module was prepared. Awareness programs were organized for all stakeholders in the community on adolescent issues. All anganwadi workers in the panchayat were trained to take interactive sessions for all theadolescents in the panchayat using the FLE module. Ward based Teen Clubs were formed inall the 13 wards of the Panchayat separately for boys and girls and FLE classes were given to them through anganwadi workers. An Adolescent Clinic was set up to provide necessary medical and counseling facilities. Adolescent Health Card was distributed to all Teen Club members and those who attended the adolescent clinics. Results The present approach stresses the need and feasibility of adolescent-centered, community-based interventions. The authors' experience showed that before starting any adolescent program, community awareness generation about the need and content of the program is very important for its success. The experience of this model has made it possible to up-scale the program to seven districts of southern Kerala as a service model. © Dr. K C Chaudhuri Foundation2011.**Address:** Child Development Centre, Medical College, Thiruvananthapuram 695011 Kerala, IndiaChild and Adolescent Psychiatry Unit, Department of Psychiatry, Christian Medical College,Vellore, Tamil Nadu, India

Nat PMID:21660405 EPH

Nair, M. K. C., Leena, M. L., Paul, M. K., Vijayan Pillai, H., Babu, G., Russell, P. S. andThankachi, Y.

Attitude of parents and teachers towards adolescent reproductive and sexual health educationIndian Journal of Pediatrics; 2012, 79 (SUPPL. 1): S60-S63

Objective To assess parents' and teachers' attitude towards Adolescent Reproductive SexualHealth Education (ARSHE). Methods The study group consisted of a random sample of 795 parents and 115 teachers belonging to three urban schools (one boys only, one girls only and one coeducation) and one co-education rural school at Thiruvananthapuram district, Kerala, where an ICMR supported ARSHE intervention programme was done subsequently. A self-administered questionnaire for parents and teachers developed by an ICMR taskforce for ARSHE programme was used to assess their opinion on the need, content and the appropriate person to provide adolescent reproductive sexual health education in a school setting. Results 65.2% of parents and 40.9% teachers have not discussed growth anddevelopment issues with their adolescents. Only 5.2% teachers and 1.1% parents discussed sexual aspects with adolescents. 44% of parents agreed that information on HIV/AIDS/STDshould be provided. More than 50% of parents were not sure whether information on topicslike masturbation, dating, safe sex, contraceptives, pregnancy, abortion and childcare should be provided to adolescents. Conclusions Results pointed out the need for introducing reproductive and sexual education in the school setting. Only 1.1% of parents and 5.2% teachers actually discussed sexual aspects with adolescents which highlights the need for parent and teacher awareness programs before ARSHE is introduced in the schools. © Dr. K C Chaudhuri Foundation 2011.**Address:** Child Development Centre, Medical College, Thiruvananthapuram 695011 Kerala, IndiaChild and Adolescent Psychiatry Unit,

Department of Psychiatry, Christian Medical College, Vellore, Tamil Nadu, India

Nat PMID:21660405 EPH

Nair, M. K. C., Paul, M. K., Leena, M. L., Thankachi, Y., George, B., Russell, P. S. andVijayan Pillai, H.

Effectiveness of a reproductive sexual health education package among school going adolescents Indian Journal of Pediatrics; 2012, 79 (SUPPL. 1): S64-S68

Objective To assess the effectiveness of a school based "Adolescent Reproductive Sexual Health Education (ARSHE) Package" in improving students' knowledge on reproductive sexual health matters. Methods An ARSHE package originally developed at Child Development Centre, Kerala, modified and approved by ICMR taskforce group was administered in three urban schools (One boys only, one girls only and one coeducation)and one co-education rural school at Thiruvananthapuram district, Kerala. The study sample consisted of 1,586 adolescents including 996 boys and 560 girls of class IX and XI. Pre andpost intervention knowledge regarding reproductive sexual health matters was assessedusing a self-administered questionnaire. Results In the pre-intervention period, it was observed that majority of adolescents were poorly informed about reproductive sexual health matters, particularly about contraceptives. As compared to boys, girls had much poorer knowledge about prevention of pregnancy and after intervention; there was a statistically significant increase in the knowledge in both boys and girls. Among girls percentage of poor knowledge had reduced significantly from 64.1% to 8.3% and among boys from 37.7% to 3.5%. Similarly, increase in knowledge level was also observed in various other aspects of reproductive and sexual health including, STI, HIV/AIDS and perceptions about premarital sex. Conclusions The study results revealed the feasibility and effectiveness of school based reproductive and sexual health education intervention programs for adolescents. © Dr. K C Chaudhuri Foundation 2011.**Address:** Child Development Centre, Medical College, Thiruvananthapuram 695011 Kerala, IndiaChild and Adolescent Psychiatry Unit, Department of Psychiatry, Christian Medical College,Vellore, Tamil Nadu, India

Nat PMID:21617909 EPH

Nalli, C., Armstrong, L., Finny, P. and Thomas, N.

Glucocorticoid misuse in a rural and semi-urban community of North Bihar: A pilot studyTropical Doctor; 2012, 42 (3): 168-170

Glucocorticoid misuse is a common problem in northern Bihar. There is very little published literature regarding the magnitude of glucocorticoid misuse in South Asia. All inpatients and medical outpatients presenting to Duncan Hospital with suspected glucocorticoid abusewere screened over a six-month period. Patients presenting with iatrogenic Cushing's syndrome and hypoadrenal crisis were assessed clinically and biochemically for the side effects of glucocorticoid misuse. Twenty-two patients were seen in the hospital over aperiod of six months. Fifteen patients presented with iatrogenic Cushing's syndrome(68.2%) and seven with hypoadrenal crisis (31.8%). Ten were found to have cataracts, six had a recent onset of diabetes, five had a recent onset of hypertension and 12 had osteoporotic fractures of the spine. Glucocorticoid misuse is an important problem which has been inadequately addressed in the rural and semi-urban communities of northern Bihar. **Address:** Duncan Hospital, A unit of Emmanuel Hospital Association, Raxaul, Bihar 845305, IndiaChristian Medical College, Vellore, TN, India

Intl PMID:22785544 EPH

Parashar, U., Tate, J., Arora, R. and Kang, G.

Prospects for routine childhood vaccination against rotavirus in IndiaNational Medical Journal of India; 2012, 25 (5): 257-260

Address: Centers for Disease Control and Prevention, Atlanta, GA, United StatesIndian Council of Medical Research, Ansari Nagar, New Delhi, IndiaChristian Medical College, Vellore, Tamil Nadu, India

Nat PMID:23448622 EPH

Patil, R. R., Muliyil, J. P., Nandy, A., Addy, A., Maji, A. K. and Chatterjee, P.

Dynamics of the antibodies in cohorts of cured cases of visceral leishmaniasis: Itsimplication on the validity of serological test, value in prognosis and in post therapeuticassessmentHuman Vaccines and Immunotherapeutics; 2012, 8 (6): 725-730The major disadvantage of a Serological test like Direct

Agglutination Test (DAT) forVisceral Leishmaniasis (also called Kala-azar) is its inability to distinguish between recent and past infection. The objective of our study was to look at rate of decline of antibodies in fully cured cases of Kala-azar and length of time it takes for DAT to become negative. Cohort Study involving completely treated Kala-azar cases from Government Hospitalduring one calendar year of study. Cases were selected on the basis of treatment cohorts 0,3, 6, 9 & 12 mo after completion of treatment. Phase I - The cases were traced and after obtaining the informed consent they were subjected to Direct Agglutination Test (DAT). Phase II - The five treatment cohorts, constituting 82 cured cases (average of 15 curedcases per each treatment cohort) were tested again with DAT three months after the firsttest. The titers of Phase-I and phase-II tests were analyzed for the dynamics of the antibodies for the period. Cutoff- Values of DAT below 1:800 are considered negative. Values of 1:800, 1:1,200, 1:1,600 and so on are considered positive. The mean titer[Geometric Mean Titer (GMT)] at the start of treatment was 1:1,120, which showed steady decline up to six months, plummeting below the cutoff titer for the DAT (1:800) at the ninth month. Antibodies continue to linger for about one year in cured Kala-azar cases even after correct and complete treatment. Single DAT results may be misleading due to high false positivity up to one year after the cure. Paired test defined as two tests 3 mo apart on the same subject. Paired test is highly recommended for diagnosis and prognosis. DAT is still a very useful tool for diagnosis if used along with clinical correlation. © 2012 Landes Bioscience.**Address:** Community Health Cell, Bangalore, India School of Public Health, SRM University, Chennai, India Christian Medical College, Vellore, IndiaSchool of Tropical Medicine and Hygiene, Calcutta, IndiaSadar Hospital, Godda; Jharkhand, India

Intl PMID:22495122 EPH

Poonnoose, P., Keshava, S., Gibikote, S. and Feldman, B. M.

Outcome assessment and limitationsHaemophilia; 2012, 18 (SUPPL.4): 125-130

Address: Departments of Orthopedics, Christian Medical College, Vellore, IndiaDepartments of Radiology, Christian Medical College, Vellore, IndiaInstitute of Health Policy Management and Evaluation, Dalla Lana School of Public Health, University of Toronto, CanadaDivision of Rheumatology, The Hospital for Sick Children, Toronto, Canada

Intl PMID:22726095 EPH

Prince, M. J., Ebrahim, S., Acosta, D., Ferri, C. P., Guerra, M., Huang, Y., Jacob, K. S., Jimenez-Velazquez, I. Z., Rodriguez, J. L., Salas, A., Sosa, A. L., Williams, J. D., Gonzalez-Viruet, M., Jotheeswaran, A. T. and Liu, Z.

Hypertension prevalence, awareness, treatment and control among older people in LatinAmerica, India and China: A 10/66 cross-sectional population-based surveyJournal of Hypertension; 2012, 30 (1): 177-187

Objectives: To estimate the prevalence, social patterning, treatment and control of hypertension among older people in the 10/66 Dementia Research Group developing country sites. Methods: Cross-sectional surveys of SBP, hypertension, and hypertensionawareness, treatment and control among 17 014 people aged 65 years and over in eighturban and four rural sites in Latin America, India and China. Results: Hypertension prevalence was higher in urban (range 52.6-79.8%) than rural sites (range 42.6-56.9%), and lower in men than women [pooled prevalence ratio 0.89, 95% confidence interval (CI)0.85-0.93]. Educational attainment was positively associated with hypertension in rural and least-developed sites. Age-standardized morbidity ratios, compared to USA (100), were higher in urban sites in Cuba (105), Dominican Republic (109), and Venezuela (107), similar in Puerto Rico (105), urban Mexico (99) and urban India (101), and lower in urban(75) and rural (61) Peru, rural Mexico (81), urban (91) and rural (84) China and rural India(65). In most Latin American centres, and urban China just over one-third of those with hypertension were controlled (BP < 140/90). Control was poor in rural China (2%), urban India (12%) and rural India (9%). The proportion controlled, not compositional factors (age, sex, education and obesity), explained most of the between-site variation in SBP. Conclusion: Uncontrolled hypertension is common among older people in developingcountries, and may rise further during the demographic and health transitions. It is a major determinant of population SBP level. Strengthening primary care to

improve hypertension management is necessary for primary prevention. © 2011 Wolters Kluwer Health | Lippincott Williams & Wilkins.**Address:** Health Services and Population Research Department, King's College London, Institute of Psychiatry, De Crespigny Park, PO Box 60, SE5 8AF London, United Kingdom South Asia Network for Chronic Diseases, Public Health Foundation of India, New Delhi and London School of Hygiene and Tropical Medicine, London, United KingdomInternal Medicine Department, Geriatric Section, Universidad Nacional Pedro HenriquezUreña (UNPHU), Santo Domingo, Dominican RepublicPsychogeriatric Unit, National Institute of Mental Health 'Honorio Delgado Hideyo Noguchi, Lima, PeruPeking University, Institute of Mental Health, Beijing, ChinaChristian Medical College, Vellore, IndiaInternal Medicine Department, School of Medicine, University of Puerto Rico, San Juan, Puerto RicoFacultad de Medicina Finlay-Albarran, Medical University of Havana, Havana, CubaMedicine Department, Caracas University Hospital, Universidad Central de Venezuela, Caracas, VenezuelaNational Institute of Neurology and Neurosurgery of Mexico, National UniversityAutonomous of Mexico, Mexico City, MexicoDepartment of Community Health, Voluntary Health Services, Chennai and LPublic HealthFoundation of India, New Delhi, India

Intl PMID:22134385 EPH

Rajapurkar, M. M., John, G. T., Kirpalani, A. L., Abraham, G., Agarwal, S. K., Almeida, A. F., Gang, S., Gupta, A., Modi, G., Pahari, D., Pisharody, R., Prakash, J., Raman, A., Rana, D.S., Sharma, R. K., Sahoo, R. N., Sakhuja, V., Tatapudi, R. R. and Jha, V.

What do we know about chronic kidney disease in India: First report of the Indian CKDregistryBMC Nephrol. 2012 Mar 6;13:10. doi: 10.1186/1471-2369-13-10.

Background: There are no national data on the magnitude and pattern of chronic kidney disease (CKD) in India. The Indian CKD Registry documents the demographics, etiologicalspectrum, practice patterns, variations and special characteristics. Methods. Data wascollected for this cross-sectional study in a standardized format according to predetermined criteria. Of the 52,273 adult patients, 35.5%, 27.9%, 25.6% and 11% patients came from South, North, West and East zones respectively. Results: The mean age was 50.1 14.6 years, with M:F ratio of 70:30. Patients from North Zone were younger and those from the East Zone older. Diabetic nephropathy was the commonest cause (31%), followed by CKD of undetermined etiology (16%), chronic glomerulonephritis (14%) and hypertensive nephrosclerosis (13%). About 48% cases presented in Stage V; they were younger than those in Stages III-IV. Diabetic nephropathy patients were older, more likely to present in earlier stages of CKD and had a higher frequency of males; whereas those with CKD ofunexplained etiology were younger, had more females and more frequently presented inStage V. Patients in lower income groups had more advanced CKD at presentation. Patients presenting to public sector hospitals were poorer, younger, and more frequently had CKD of unknown etiology. Conclusions: This report confirms the emergence of diabetic nephropathy as the pre-eminent cause in India. Patients with CKD of unknown etiology are younger, poorer and more likely to present with advanced CKD. There were some geographic variations. © 2012 Rajapurkar et al; licensee BioMed Central Ltd.**Address:** Department of Nephrology, Muljibhai Patel Society for Research in Nephro- Urology, Dr Virendra Desai Road, Nadiad 387001, IndiaDepartment of Nephrology, Christian Medical College, Ida Scudder Road, 632004 Vellore, IndiaDepartment of Nephrology, Bombay Hospital, 12, Marine Lines, Mumbai 400020, IndiaDepartment of Nephrology, Madras Medical Mission, 4-A, Dr. J. Jayalalitha Nagar, Mogappair, Chennai 600037, IndiaDepartment of Nephrology, All India Institute of Medical Sciences, Ansari nagar, New Delhi110029, IndiaDepartment of Nephrology, P.D. Hinduja National Hospital, Medical Research Centre, VeerSavarkar Marg, Mahim, Mumbai 400 016, IndiaDepartment of Nephrology, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Raibarely Road, Lucknow 226014, IndiaSamarpan Kidney Center, B 288 C Sector, Shahpura, Bhopal 462019, IndiaDepartment of Nephrology, Medica Superspecialty Hospital, 127 Mukundapur, E.M Bypass, Kolkata 700099, IndiaDepartment of Nephrology, Government Medical College, Ulloor Road, Trivandrum 695011, IndiaDepartment of Nephrology, Institute of Medical Sciences, Banaras Hindu University, Varanasi 221005, IndiaDepartment of Nephrology, Mediciti Hospital, 5-9-22, Secretariat Road, Hyderabad 500063, IndiaDepartment of Nephrology, Sir Gangaram Hospital, Rajinder Nagar, New Delhi

110060,IndiaDepartment of Nephrology, SCB Medical College, Buxibazar, Cuttack 753007, IndiaDepartment of Nephrology, Postgraduate Institute of Medical Education and Research, Chandigarh 160012, IndiaDepartment of Nephrology, Andhra Medical College, M.R. Peta, Vishakhapattanam 530002, India

Intl PMID:22390203 EPH

Rajendran, P., Babji, S., George, A. T., Rajan, D. P., Kang, G. and Ajjampur, S. S.

Detection and species identification of Campylobacter in stool samples of children and animals from Vellore, south IndiaIndian Journal of Medical Microbiology; 2012, 30 (1): 85-88

Campylobacter spp. are an important cause of bacterial gastroenteritis frequently isolated from animal, poultry and environmental samples. In this study, we investigated thezoonotic potential of Campylobacter spp. by comparing prevalence rates and species in 394 children with diarrhoea and 652 animals in Vellore using PCR-based tools. Eighteen children(4.5%) had campylobacteriosis, a majority of whom had co-pathogens (15/18) and most were infected with Campylobacter jejuni (16/18). A few C. coli and mixed infections withboth species were also seen. Among the animal samples, 16/25 chicken samples (64%)were positive and all were found to be C. jejuni.**Address:** Department of Gastrointestinal Sciences, Christian Medical College, Vellore - 632004, Tamil Nadu, India

Nat PMID:22361767 EPH

Rakesh, P. S., Ramesh, R., Rachel, P., Chanda, R., Satish, N. and Mohan, V. R.

Quality of life among people with epilepsy: A cross-sectional study from rural southernIndiaNational Medical Journal of India; 2012, 25 (5): 261-264

Background. Epilepsy can be associated with profound physical, social and psychological consequences and it has an impact on a person's quality of life. We assessed the quality oflife and factors associated with a poor quality of life, among adults with epilepsy in a ruralblock of Tamil Nadu. Methods. We interviewed 91 epilepsy patients from 20 randomly selected villages using a structured questionnaire including World Health Organization Quality of Life BREF (WHOQOL-BREF), Patient Health Questionnaire 2 (PHQ-2) andGeneralized Anxiety Disorder 7 (GAD-7) questionnaires. Results. The mean (SD) total score of the quality of life scale was 61.49 (12.56). Those who were single, separated or widowed (t statistic= -2.71, p<0.01), had not completed primary education (t statistic=-2.308, p<0.05), not currently going for work (t statistic=-2.748, p<0.01), had seizure in the past one year (t statistic=-4.068, p<0.01), had depressive symptoms (t statistic=-3.207, p<0.01), had higher anxiety scores (t statistic=-2.727, p<0.01), had low scores in the quality of life questionnaire. Multivariate analysis showed increasing age, education less than grade V, being unmarried, widowed or separated, lower per capita income, a high anxiety score and experiencing a seizure episode in the past one year to be significantly associated with a low score in the WHOQOL-BREF questionnaire (adjusted R2=0.378, SE9.90). Conclusion. The presence of anxiety, lack of primary education, being single, separated or widowed, increasing age, low per capita income and having a seizure episodein the past year are associated with lower quality of life among people with epilepsy. © TheNational Medical Journal of India 2012.**Address:** Department of Community Health, Christian Medical College, Vellore 632004, Tamil Nadu, India

Nat PMID:23448623 EPH

Ramakrishna, K., Sampath, S., Chacko, J., Chacko, B., Narahari, D. L., Veerendra, H. H., Moorthy, M., Krishna, B., Chekuri, V. S., Raju, R. K., Shanmugasundaram, D., Pichamuthu, K., Abraham, A. M., Abraham, O. C., Thomas, K., Mathews, P., Varghese, G. M., Rupali, P.and Peter, J. V.

Clinical profile and predictors of mortality of severe pandemic (H1N1) 2009 virus infection needing intensive care: A multi-centre prospective study from South IndiaJournal of Global Infectious Diseases; 2012, 4 (3): 145-152

Background: This multi-center study from India details the profile and outcomes of patients admitted to the intensive care unit (ICU) with pandemic Influenza A (H1N1) 2009 virus[P(H1N1)2009v] infection. Materials and Methods: Over 4 months, adult patients diagnosedto have P(H1N1)2009v infection by real-time RT-PCR of respiratory specimens and requiring ICU admission were followed up until death or hospital discharge. Sequential organ

failure assessment (SOFA) scores were calculated daily. Results: Of the 1902 patients screened,464 (24.4%) tested positive for P(H1N1)2009v; 106 (22.8%) patients aged 3511.9 (meanSD) years required ICU admission 5.82.7 days after onset of illness. Common symptoms were fever (96.2%), cough (88.7%), and breathlessness (85.9%). The admission APACHE-II and SOFA scores were 14.46.5 and 5.53.1, respectively. Ninety-six(90.6%) patients required ventilation for 10.17.5 days. Of these, 34/96 (35.4%) were non- invasively ventilated; 16/34 were weaned successfully whilst 18/34 required intubation. Sixteen patients (15.1%) needed dialysis. The duration of hospitalization was 14.08.0 days. Hospital mortality was 49%. Mortality in pregnant/puerperal women was 52.6% (10/19). Patients requiring invasive ventilation at admission had a higher mortality than those managed with non-invasive ventilation and those not requiring ventilation (44/62 vs. 8/44, P<0.001). Need for dialysis was independently associated with mortality (P=0.019). Although admission APACHE-II and SOFA scores were significantly (P<0.02) higher in non- survivors compared with survivors on univariate analysis, individually, neither were predictive on multivariate analysis. Conclusions: In our setting, a high mortality was observed in patients admitted to ICU with severe P(H1N1)2009v infection. The need for invasive ventilation and dialysis were associated with a poor outcome. **Address:** Medical Intensive Care Unit, IndiaDepartment of Medicine, IndiaDepartment of Virology, IndiaDepartment of Biostatistics, Christian Medical College Hospital, Vellore, India Medical Intensive Care Unit, St. John's Medical College Hospital, Bangalore, India Medical Intensive Care Unit, Manipal Hospital, Bangalore, India

Nat PMID:23055645 EPH

Russell, P. S., Basker, M., Russell, S., Moses, P. D., C. Nair, M. K. and Minju, K. A.

Comparison of a self-rated and a clinician-rated measure for identifying depression amongadolescents in a primary-care settingIndian Journal of Pediatrics; 2012, 79 (SUPPL. 1): S45-S51

Objective To compare the diagnostic accuracy of a selfrated and a clinician rated measure of depression for primary care use in school setting by pediatricians. Methods Two tools forscreening depression were administered to early adolescents in three schools. Theseincluded the self-rated Beck Depression Inventory (BDI), pediatrician rated Children'sDepression Rating Scale-Revised (CDRS-R), and ICD-10 clinical interview by a psychiatristas reference standard. These tools were compared for their overall performance using Areas Under the Curve (AUC) of Receiver Operating Characteristic (ROC) curves. The optimal screening threshold score for both tools were identified from their sensitivity and specificity plotted for all threshold scores. For the optimal cut-off scores, the diagnostic accuracy parameters like sensitivity, specificity, predictive values, likelihood ratio and diagnostic odds ratio were calculated using contingency table. Results The area under the curve for BDI was0.67 and CDRS was 0.50 suggesting that BDI as a screening tool has better diagnostic accuracy. The optimal screening threshold score for BDI was 18 with a sensitivity of 63 andspecificity of 70. For the CDRS-R cut-off score of 59, the sensitivity was 36 and specificitywas 82 respectively. Using both tools concurrently improved the diagnostic accuracy. Conclusions Using the ROC characteristics and various validity indices, the authors showed that BDI has better sensitivity and CDRS-R a better specificity. It might be prudent to use both these instrument simultaneously to improve the identification of depression in primary care settings like school health clinic. **Address:** Child and Adolescent Psychiatry Unit, Christian Medical College, Vellore 632 004, IndiaChild Development Centre, Thiruvananthapuram Medical College, ThiruvananthapuramKerala, India

Nat PMID:21625845 EPH

Russell, P. S., Mammen, P., Nair, M. K. C., Russell, S. and Shankar, S. R.

Priority mental health disorders of children and adolescents in primary-care pediatric setting in india 1: Developing a child and adolescent mental health policy, program, and servicemodelIndian Journal of Pediatrics; 2012, 79 (SUPPL. 1): S19-S26

India has a huge child and adolescent population. Psychiatric disorders are widely prevalent and the mental health needs of these children are well recognized. Nonetheless, there areno country-centric and child specific mental health policies, plans or

programs. There is alsoa significant lack of human resources for child and adolescent mental health in India. This combination of factors makes the primary care a critical setting for the early identification, treatment, consultation and referral of children and adolescents with mental health and developmental needs. Even though the importance of primary care as a system for addressing the mental health care has been recognized for decades, its potential requires further development in India as the Child and Adolescent Mental Health Services (CAMHS) emerge and evolve. A country and child specific mental health policy, plan and program needs to be formulated as well an integrated, multi-tier CAMHS with a focus on the primary-care physicians as care providers for this population has to be developed. **Address:** Child and Adolescent Psychiatry Unit, Christian Medical College, Vellore 632 004,IndiaChild Development Centre, Thiruvananthapuram Medical College, ThiruvananthapuramKerala, India

Nat EPH

Russell, P. S., Nair, M. K. C., Mammen, P. and Shankar, S. R.

Priority mental health disorders of children and adolescents in primary-care pediatric settings in india 2: Diagnosis, pharmacological treatment and referralIndian Journal of Pediatrics; 2012, 79 (SUPPL. 1): S27-S32

The advent of pediatric psychopharmacology has enormously improved psychiatric care of children and adolescents. Nonetheless, our practice of diagnosis, treatment and referral in primary-care pediatric settings is not optimum as current evidence based knowledge is notregularly applied in the actual clinical circumstances. To help primary-care pediatriciansminimise this in researchclinical practice, pharmacological treatment and referral in their clinical practice, they need to follow a two-tier diagnostic and multi axial treatment approach. The twotier diagnostic approach of using a screening measure followed by confirmation of the screen positive cases with reference standard clinical criterion, improves the sensitivity and specificity. The multiaxial treatment has the advantage of offering a holistic approach to the intervention and improve prognosis from the interacting axes. The primary-care physician should be aware of the medications of choice for the Priority Mental Health Disorders and their drug interactions. Finally, referral of cases with atypical presentations, multiple comorbidities and poor response to the first-line of treatment needs referral to the next tier in the system. **Address:** Child and Adolescent Psychiatry Unit, Christian Medical College, Vellore 632 004, IndiaChild Development Centre, Thiruvananthapuram Medical College, Thiruvananthapuram,India

Nat PMID: 21617912 EPH

Sebastian, S., Suresh, B. A., Simon, S. and Ballraj, A.

Risk factors for hyperfunctional voice disorders among teachers*Online Journal of Health and Allied Sciences***Peer Reviewed, Open Access, Free Online JournalPublished Quarterly : Mangalore, South India : ISSN 0972-5997Volume 11, Issue 2; Apr-Jun 2012**

The aim of the study was to assess the prevalence of voice problems among teachers, and identify risk factors for developing voice pathology. In this study we evaluated 448 teachers (400 females and 48 males) between the age range of 25 to 55 years, from primary school as well as secondary school which were selected randomly. A questionnaire was given to them to find out how many of them had a voice problem. All the positive cases were further evaluated by an Otorhinolaryngologist, an Audiologist and a Speech Language Pathologist. Out of the 448 teachers, 39 of them(9%) had an indication of voice disorder based on the positive respose got from the questionnaire. Among the 39 cases identified 11 were males (28%) and 28 were females (71%). We tried to investigate on the factors that would have contributed to voice problem in the identified 9% of cases .Detailed history was taken and was examined by an otorhinolaryngologist, an audiologist and a Speech Language Pathologist. Out of the 39 cases identified 26% had history of recurrent allergic rhinitis and laryngitis, 18% had sinusitis and post nasal drip, 18% had asthma, 26% had gastoesophageal reflux disorder, (8%) had minimal sensori neural hearing loss and hypothyroidism was found in 8%. Interaction of multiple factors like hereditory, behavioral, lifestyle, medical and environmental can contribute to voice

disorders in occupational voice users. Teachers need to be educated regarding vocal mechanism, vocal hygiene and effective voice use, dust free and noise free work environment, diet modification like drinking adequate water, avoiding spicy and deep fried food, regularizing meals and avoiding sleeping immediately after food. The underlying medical issues like allergy, sinusitis, laryngitis, hypothyroidism, gastroesophageal reflux, hearing loss etc also need tobe addressed, since vocal hygiene alone will not help until and unless the underlying causeis taken care of.**Address:** Department of ENT, Christian Medical College and Hospital, Vellore, IndiaMarthoma College of Special Education, Kasaragod, Kerala, India

Nat EPH

Russell, P. S., Tsheringla, S., Nair, M. K. C. and Minju, K.

A.Priority mental health disorders of children and adolescents in primary-care pediatric settings in india 4: Training and capacity building

Indian Journal of Pediatrics; 2012, 79 (SUPPL. 1): S39-S44Training in the primary-care child and adolescent mental health should take into consideration the local milieu, national health care education and development. It should aim to improve the mental health knowledge, competency as well as develop professionalrelationships between various primary, secondary and tertiary-care mental health providersto enhance outcomes. The collaborative training between the various stakeholders in theChild and Adolescent Mental Health (CAMH) should be enhanced. Currently, the favoured methods, to augment the training for practicing Primary-care Physicians, like CME and short training programs with their specific goals, settings and methodology are well documented.However, to improve the skills in CAMH for medical trainees at undergraduate andpostgraduate levels, restructuring of the curriculum is essential. © Dr. K C ChaudhuriFoundation 2011.**Address:** Child and Adolescent Psychiatry Unit, Department of Psychiatry, Christian MedicalCollege, Vellore, IndiaChild Development Centre, Thiruvananthapuram Medical College, ThiruvananthapuramKerala, IndiaDepartment of Psychiatry, Christian Medical College, Vellore 632 002, India

Nat PMID: 21617910 EPH

Russell, S., Russell, P. S., Darpan Kaur, M. S., Nair, M. K. C. and Darilin, D.

Priority mental health disorders of children and adolescents in primary-care pediatric settings in india 3: Psychotherapy and other non-pharmacological interventions Indian Journal of Pediatrics; 2012, 79 (SUPPL. 1): S33-S38

The pediatrician is a primary column of support for children and adolescents with a myriad of mental health problems in low-mental health care resource countries like India. While majority of mental health consultations happen in primary-care, and only 10% are referred successfully for specialised help, there is a clear role for pediatrician psychotherapists in primary care. The primary-care pediatricians should be aware of the indications for psychotherapy, the various approaches that could be used in primary-care settings, the structure and the process of the psychotherapeutic technique involved, the suggested specific techniques for the Priority Mental Health Disorders and the evidence available to support their use as well as the developmental modifications that are required based on the cognitive development of the child or adolescent. © Dr. K C Chaudhuri Foundation 2011. **Address:** Child and Adolescent Psychiatry Unit, Department of Psychiatry, Christian Medical College, Vellore 632004, IndiaChild Development Centre, Thiruvananthapuram Medical College, Thiruvananthapuram, India

Nat PMID:21617911 EPH

Sarkar, R., Ajjampur, S. S. R., Muliyil, J., Ward, H., Naumova, E. N. and Kang, G.

Serum IgG responses and seroconversion patterns to cryptosporidium gp15 among children in a birth cohort in south IndiaClinical and Vaccine Immunology; 2012, 19 (6): 849-854

The correlates of protective immunity to cryptosporidiosis are not well understood. This study was conducted to assess the effect of maternal serum IgG against Cryptosporidiumgp15 on responses to this antigen in children with (cases) and without (controls) PCR-confirmed cryptosporidial diarrhea. Maternal sera (n=129) and sera from cases (n=39) and controls (n=90) collected at 3.5, 9, and 24 months of age were tested for serum IgG against Cryptosporidium gp15 by enzyme-linked immunosorbent assay (ELISA). Seroconversion patterns were evaluated by estimating probabilities of

seroconversion along three time points based on the transition pathways by using a first-order Markov chain process and empirical Bayesian estimates. There was no difference in serum IgG levels or seropositivity rates to gp15 between cases and controls across all time points in children or in IgG levels to this antigen between mothers of cases and controls. The most common transition pathway can be described as a seronegative child at 3.5 months whoseroconverts at 9 months and remains seropositive at 24 months. This pattern remainedstable irrespective of the serological status of the mother or the case or control status of the child. Children were most likely to be exposed to Cryptosporidium for the first time between the ages of 3 and 9 months, and most of the children seroconverted by 24 months. The high degree of seroconversion among control children is suggestive of high rates of asymptomatic transmission in this region. **Address:** Department of Gastrointestinal Sciences, Christian Medical College, Vellore, IndiaCommunity Health Department, Christian Medical College, Vellore, IndiaDivision of Geographic Medicine and Infectious Diseases, Tufts Medical Center, TuftsUniversity School of Medicine, Boston, MA, United StatesDepartment of Civil and Environmental Engineering, Tufts University School of Engineering, Medford, MA, United States

Intl PMID:22518011 EPH

Sosa, A. L., Albanese, E., Stephan, B. C. M., Dewey, M., Acosta, D., Ferri, C. P., Guerra, M., Huang, Y., Jacob, K. S., Jiménez-Velázquez, I. Z., Rodriguez, J. J., Salas, A., Williams, J., Acosta, I., González-Viruet, M., Guerra Hernandez, M. A., Shuran, L., Prince, M. J. andStewart, R.

Prevalence, distribution, and impact of mild cognitive impairment in Latin America, China, and India: A 10/66 population-based study PLoS Med. 2012 Feb; 9(2):e1001170. doi: 10.1371/journal.pmed.1001170. Epub 2012 Feb7.

Background: Rapid demographic ageing is a growing public health issue in many low- and middle-income countries (LAMICs). Mild cognitive impairment (MCI) is a constructfrequently used to define groups of people who may be at risk of developing dementia,crucial for targeting preventative interventions. However, little is known about the prevalence or impact of MCI in LAMIC settings. Methods and Findings: Data were analyzed from cross-sectional surveys established by the 10/66 Dementia Research Group and carried out in Cuba, Dominican Republic, Peru, Mexico, Venezuela, Puerto Rico, China, and India on 15,376 individuals aged 65+ without dementia. Standardized assessments of mental and physical health, and cognitive function were carried out including informant interviews. An algorithm was developed to define Mayo Clinic amnestic MCI (aMCI). Disability (12-item World Health Organization disability assessment schedule [WHODAS]) and informant-reported neuropsychiatric symptoms (neuropsychiatric inventory [NPI-Q])were measured. After adjustment, aMCI was associated with disability, anxiety, apathy, and irritability (but not depression); between-country heterogeneity in these associations was only significant for disability. The crude prevalence of aMCI ranged from 0.8% in China to4.3% in India. Country differences changed little (range 0.6%-4.6%) after standardization for age, gender, and education level. In pooled estimates, aMCI was modestly associated with male gender and fewer assets but was not associated with age or education. Therewas no significant between-country variation in these demographic associations?Conclusions: An algorithm-derived diagnosis of aMCI showed few sociodemographic associations but was consistently associated with higher disability and neuropsychiatric symptoms in addition to showing substantial variation in prevalence across LAMIC populations. Longitudinal data are needed to confirm findings-in particular, to investigate the predictive validity of aMCI in these settings and risk/protective factors for progression to dementia; however, the large number affected has important implications in these rapidly ageing settings. Please see later in the article for the Editors' Summary. © 2012Sosa et al.**Address:** National Institute of Neurology and Neurosurgery, Autonomous NationalUniversity of Mexico, Mexico City, MexicoLaboratory of Epidemiology, Demography and Biometry, National Institute on Aging, Bethesda, MD, United StatesUniversity of Cambridge, Cambridge, United KingdomKing's College London (Institute of Psychiatry), London, United KingdomUniversidad Nacional Pedro Henriquez Ureña (UNPHU), Internal Medicine Department, Geriatric Section, Santo

Domingo, Dominican RepublicUniversidad Peruana Cayetano Heredia, Instituto de la Memoria y Desordenes Relacionados,PeruPeking University, Institute of Mental Health, Beijing, China, Christian Medical College, Vellore, IndiaUPR, School of Medicine, San Juan, Puerto RicoMedical University of Havana, CubaMedicine Department, Caracas University Hospital, Faculty of Medicine, Universidad Central de Venezuela, Caracas, VenezuelaInstitute of Community Health, Voluntary Health Services, Chennai, IndiaPsy D Program Carlos Albizu University, San Juan, Puerto RicoPoliclinico Universitario 27 de Noviembre, Havana, Cuba

Intl PMID:22346736 EPH

Vasan, S. K., Pittard, A. E., Abraham, J., Samuel, P., Seshadri, M. S. and Thomas, N.

Cause-specific mortality in diabetes: Retrospective hospital based data from south India Journal of Diabetes; 2012, 4 (1): 47-54

Background: India lacks comprehensive mortality data in individuals with diabetes. Thepresent retrospective case-control study compared the causes of death in diabetic and non- diabetic inpatients in a tertiary care hospital in 2007. Methods: Deaths in diabetic patients (n=315) were compared with 307 randomly selected controls. Medical chart review established the primary cause of death, demographics, and clinical data. Data were summarized using descriptive statistics and comparative analyses were performed. Results: Of the 79067 inpatient admissions during 2007, diabetes of any type was recorded for 6517 (8.2%). There were 2017 inpatient deaths registered, 315 (15.6%) in diabetic patients and1702 (84.4%) in non-diabetic patients, corresponding to mortality rates of 48.3/1000 admissions for diabetic patients and 23.4/1000 admissions for non-diabetic patients. The mean duration of hospitalization prior to death in diabetic versus non-diabetic patients was6.4 vs 7.7days (P=0.015). Causes of death in diabetic patients were vascular disease(38.4%), infection (34.3%), renal failure (8.9%), and malignancy (8.9%); diabetic patients had significantly higher odds of death from vascular disease (odds ratio [OR] 4.05, 95% confidence interval [CI] 2.67-6.16; Pd"0.0001), renal causes (OR 7.39, 95%CI 2.53-29.27; Pd"0.001) and infection (OR 1.61, 95% CI 1.12-2.32; Pd"0.0001). Comparing cases and controls after stratifying by age (<56 and e"56years), the greater odds of vascular death among diabetics remained significant in both age categories. Conclusions: We report vascular disease as the leading cause of death among diabetic hospital inpatients in one tertiary care center in India, in contrast with previous hospital-based studies from India. ©2011 Ruijin Hospital, Shanghai Jiaotong University School of Medicine and BlackwellPublishing Asia Pty Ltd.**Address:** Rolf Luft Centre for Diabetes and Endocrinology, Department of Molecular Medicine and Surgery, Karolinska Institute, Stockholm, SwedenDepartment of Endocrinology Diabetes and Metabolism, Christian Medical College andHospital, Vellore, Tamil Nadu, IndiaAlbert Einstein College of Medicine, Bronx, NY, United StatesDepartment of Biostatistics, Christian Medical College and Hospital, Vellore, Tamil Nadu, India

Intl PMID: 22018101 EPH

Vidwan, N. K., Regi, A., Steinhoff, M., Huppert, J. S., Staat, M. A., Dodd, C., Nongrum, R., Anandan, S. and Verghese, V.

Low prevalence of Chlamydia trachomatis infection in non-urban pregnant women inVellore, S. IndiaPLoS One. 2012;7(5):e34794. doi: 10.1371/ journal.pone.0034794. Epub 2012 May 2.

Objective: To determine the prevalence and risk factors for Chlamydia trachomatis (CT)infection in pregnant women and the rate of transmission of CT to infants. Methods:Pregnant women (e"28 weeks gestation) in Vellore, South India were approached for enrollment from April 2009 to January 2010. After informed consent was obtained, women completed a socio-demographic, prenatal, and sexual history questionnaire. Endocervical samples collected at delivery were examined for CT by a rapid enzyme test and nucleic acid amplification test (NAAT). Neonatal nasopharyngeal and conjunctival swabs were collected for NAAT testing. Results: Overall, 1198 women were enrolled and 799 (67%) endocervical samples were collected at birth. Analyses were completed on 784 participants with available rapid and NAAT results. The mean age of women was 25.8 years (range 18-39 yrs) and22% (95% CI: 19.7-24.4%) were primigravida. All women enrolled were married; one reported >one sexual partner; and six reported prior STI. We found 71 positive rapid CTtests and 1/784 (0.1%; 95% CI: 0-0.38%) true positive CT infection using

NAAT.Conclusions: To our knowledge, this is the largest study on CT prevalence amongst healthy pregnant mothers in southern India, and it documents a very low prevalence with NAAT. Many false positive results were noted using the rapid test. These data suggest that universal CT screening is not indicated in this population. © 2012 Vidwan et al.**Address:** Cincinnati Children's Hospital Medical Center, Cincinnati, OH, United StatesChristian Medical College, Vellore, Tamil Nadu, India

Intl PMID: 22567090 EPH

Augustine, A. M., Chrysolyte, S. B., Thenmozhi, K. and Rupa, V.

Assessment of Auditory and Psychosocial Handicap Associated with Unilateral Hearing

Loss Among Indian PatientsIndian Journal of Otolaryngology and Head and Neck Surgery; 2012, 1-6In order to assess psychosocial and auditory handicap in Indian patients with unilateral sensorineural hearing loss (USNHL), a prospective study was conducted on 50 adults with USNHL in the ENT Outpatient clinic of a tertiary care centre. The hearing handicap inventory for adults (HHIA) as well as speech in noise and sound localization tests were administered to patients with USNHL. An equal number of age-matched, normal controls also underwent the speech and sound localization tests. The results showed that HHIA scores ranged from 0 to 60 (mean 20.7). Most patients (84.8 %) had either mild to moderate or no handicap. Emotional subscale scores were higher than social subscale scores (p = 0.01). When the effect of sociodemographic factors on HHIA scores was analysed, educated individuals were found to have higher social subscale scores (p =0.04). Age, sex, side and duration of hearing loss, occupation and income did not affect HHIA scores. Speech in noise and sound localization were significantly poorer in cases compared to controls (p < 0.001). About 75 % of patients refused a rehabilitative device. We conclude that USNHL in Indian adults does not usually produce severe handicap. When present, the handicap is more emotional than social. USNHLsignificantly affects sound localization and speech in noise. Yet, affected patients seldom seek a rehabilitative device. © 2012 Association of Otolaryngologists of India.**Address:** Department of ENT, Unit III, Speech and Hearing, Christian Medical College,Vellore, 632004, India

Nat EPH

Brinda, E. M., Rajkumar, A. P., Enemark, U., Prince, M. and Jacob, K. S.

Nature and determinants of out-of-pocket health expenditure among older people in a rural Indian communityInt Psychogeriatr. 2012 Oct;24(10):1664-73. doi: 10.1017/S104161021200083X. Epub2012 May 22.

Background: Increasing out-of-pocket health expenditure among older people worsens the inequitable access to essential health services in low and middle-income countries(LMIC). We investigated various socioeconomic and health factors associated with out-of-pocket and catastrophic health expenditures among rural older people in India. Methods: We recruited 1,000 participants aged above 65 years from Kaniyambadi block, Vellore, India. We assessed their out-of-pocket health expenditure, health service utilization, socioeconomic profiles, disability, cognition, and health status by standard instruments. We employed appropriate multivariate statistics evaluating these determinants. Results: Male gender, poor sanitation, diabetes, tuberculosis, malaria, respiratory ailments, gastrointestinal diseases, dementia, depression, and disabilitywere associated with higher out-of-pocket expenditures. Illiteracy, tuberculosis, diabetes, and dementia increased the risk for catastrophic health expenditures, while pension schemes protected against it. Income inequalities were associated with inequities on education, disease prevalence, and access to safe water, sanitation, and nutrition. Conclusions: Interactions between determinants of out-of-pocket health expenditure, economic inequality, and inequities on essential health care delivery to older people are complex. We highlight the need for equitable health services and policies, focusing on both medical and social determinants. © 2012 Copyright International Psychogeriatric Association.**Address:** Department of Psychiatry, Christian Medical College, Vellore 632002, TamilNadu, IndiaDepartment of Health Services Research, Aarhus University, Aarhus, Denmark Center for Psychiatric Research, Aarhus University Hospital, Risskov, Denmark Department of Health Service and Population

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Intl PMID:22613070 EPH

De Kleijn, P., Odent, T., Berntorp, E., Hilliard, P., Pasta, G., Srivastava, A., Iliescu, A. and Mohanty, S.
Differences between developed and developing countries in paediatric care inhaemophiliaHaemophilia; 2012, 18 (SUPPL.4): 94-100

The aim of this article is to provide an up-to-date overview on paediatric haemophilia care in the world, with emphasis on medical treatment, rehabilitation, and orthopaedic surgery. The reason these specific professions caregivers are included is that over 90% of bleeding episodes in people with haemophilia (PWH) occur within the musculoskeletal system; and of these 80% of bleedings occur in joints. © 2012 Blackwell Publishing Ltd. **Address:** UMC, Utrecht, NetherlandsDepartment of Orthopaedic Surgery, Hopital Des Enfants Malades Assistance PubliqueHopitaux De Paris, FranceDepartment for Coagulation Disorders Malmö University Hospital Malmö, SwedenHemophilia Program, Hematology/ Oncology Clinic, Hospital For Sick Children, Toronto, ON, CanadaOrthopedic Department, Haemophilia Centre Angelo Bianchi Bonomi, Milan, ItalyChristian Medical College, Vellore, IndiaRomania Hemophilia Association, Timisoara, RomaniaKing Edward Memorial Hospital, Mumbai, India

Intl PMID:22726090 EPH

Isaac, R., Finkel, M., Olver, I., Annie, I. K., Prashanth, H. R., Subhashini, J., Viswanathan, P. N. and Trevena, L. J.
Translating evidence into practice in low resource settings: Cervical cancer screening tests are only part of the solution in rural IndiaAsian Pacific Journal of Cancer Prevention; 2012, 13 (8): 4169-4172

Background: The majority of women in rural India have poor or no access to cervical cancer screening services, although one-quarter of all cervical cancers in the world occur there. Several large trials have proven the efficacy of low-tech cervical cancer screeningmethods in the Indian context but none have documented the necessary componentsand processes of implementing this evidence in a low-resource setting. Methods: This paper discusses a feasible model of implementation of cervical cancer screening programme in low-resource settings developed through a pilot research project carried out in rural Tamilnadu, India. The programme used visual inspection of cervix after acetic acid application (VIA) as a screening tool, nurses in the primary care centres as the primary screeners and peer educators within Self-Help Women groups to raise community awareness. Results: The uptake of screening was initially low despite theaccess to a screening programme. However, the programme witnessed an incrementalincrease in the number of women accessing screening with increasing community awareness. Conclusions: The investigators recommend 4 key components to programme implementation in low-resource setting: 1) Evidence-based, cost-effective test and treatment available within the reach of the community; 2) Appropriate referralpathways; 3) Skilled health workers and necessary equipment; and 4) Optimisation of health literacy, beliefs, attitudes of the community.**Address:** RUHSA Department, Christian Medical College, Vellore, IndiaWeill Cornell Medical College, New York, United StatesCancer Council Australia, University of Sydney, AustraliaDept of Radiotherapy, Christian Medical College, Vellore, IndiaSydney School of Public Health, University of Sydney, Australia

Intl PMID:23098426 EPH

John, T. J. and Vashishtha, V. M.
Polio vaccination in PakistanThe Lancet; 2012, 380 (9854): 1645

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Intl PMID: 23141611 EPH

Khositseth, S., Bruce, L. J., Walsh, S. B., Bawazir, W. M., Ogle, G. D., Unwin, R. J., Thong, M. K., Sinha, R., Choo, K. E., Chartapisak, W., Kingwatanakul, P.,Sumboonnanonda, A., Vasuvattakul, S., Yenchitsomanus, P. and Wrong, O.
Tropical distal renal tubular acidosis: Clinical and epidemiological studies in 78 patientsQJM; 2012, 105 (9): 861-877

Background: Distal renal tubular acidosis (dRTA) caused by mutations of the SLC4A1 gene encoding the erythroid and kidney isoforms of anion exchanger 1 (AE1 or band 3) has a high prevalence in some tropical countries,

particularly Thailand, Malaysia, the Philippines and Papua New Guinea (PNG). Here the disease is almost invariably recessive and can result from either homozygous or compound heterozygous SLC4A1 mutations. Methods: We have collected and reviewed our own and published data ontropical dRTA to provide a comprehensive series of clinical and epidemiological studies in78 patients. Results: Eight responsible SLC4A1 mutations have been described so far, four of them affecting multiple unrelated families. With the exception of the mutation causing South-East Asian ovalocytosis (SAO), none of these mutations has been reported outside the tropics, where dRTA caused by SLC4A1 mutations is much rarer and almost always dominant, resulting from mutations that are quite different from those found in the tropics. SLC4A1 mutations, including those causing dRTA, may cause morphological red cell changes, often with excess haemolysis. In dRTA, these red cell changes are usually clinically recessive and not present in heterozygotes. The high tropical. © The Author 2012. All rights reserved.**Address:** Department of Pediatrics, Faculty of Medicine, Thammasat University, Klongluang, Pathumthani, Bangkok 12120, Thailand, Bristol Institute for Transfusion Sciences, NHS Blood and Transplant, Bristol BS34 7QH, United KingdomUCL Centre for Nephrology, University College London, London NW2 2PF, UnitedKingdomDepartment of Biochemistry, University of Bristol, Bristol BS8 1TD, United KingdomHOPE worldwide (PNG), Port Moresby, Papua New GuineaGenetics and Metabolism Unit, Department of Paediatrics, Faculty of Medicine, University of Malaya, Kuala Lumpur 50603, MalaysiaDepartment of Child Health Unit II and Pediatric Nephrology, Christian Medical Collegeand Hospital, Vellore, IndiaDepartment of Paediatrics, School of Medical Sciences, Health Campus, Kubang Kerian,16150, Kelantan, MalaysiaDepartment of Pediatrics, Faculty of Medicine, Chiangmai University, Maung district, Chiangmai 50200, ThailandDepartment of Pediatrics, Faculty of Medicine, Chulalongkorn University, Pathumvan, Bangkok 10330, ThailandDepartment of Pediatrics, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkoknoi, Bangkok10700, ThailandDepartment of Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkoknoi, Bangkok10700, ThailandDivision of Molecular Medicine, Department of Research and Development, Faculty ofMedicine Siriraj Hospital, Mahidol University, Bangkoknoi, Bangkok10700, Thailand

Intl PMID:22919024 EPH

Laishram, S., Kannan, A., Rajendran, P., Kang, G. and Ajjampur, S. S. R.

Mixed Giardia duodenalis assemblage infections in children and adults in South IndiaEpidemiology and Infection; 2012, 140 (11): 2023-2027

The assemblages of Giardia duodenalis in 25 children with and 25 children without diarrhoea and 24 adults with gastrointestinal symptoms in South India were determined. Polymerase chain reaction-restriction fragment length polymorphism (PCR-RFLP) targeting the glutamate dehydrogenase (gdh), ?-giardin and triosephosphate isomerase (tpi) genes was used. The tpi PCR was the most sensitive and detected G. duodenalis in all 74 microscopy-positive samples, while gdh and ?-giardin PCR were positive in 622% and 568% of the samples. Assemblage B was predominant in both children and adults (824%) followed by assemblage AII (94%); assemblage AI was not detected. Infections with both assemblages A and B (detected by tpi PCR-RFLP) were seen exclusively in children and the mixed assemblage BIII and BIV (detected by gdh PCR-RFLP) was more common in children than adults (P=0058). © Copyright Cambridge University Press2012.**Address:** Department of Gastrointestinal Sciences, Christian Medical College, Vellore-632004, Tamil Nadu, IndiaDepartment of Gastrointestinal Sciences, Christian Medical College, Vellore, India

Intl PMID:22225911 EPH

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Understanding reduced rotavirus vaccine efficacy in low socio-economic settingsPLoS One. 2012;7(8):e41720. doi: 10.1371/journal.pone.0041720. Epub 2012 Aug 6, PLoS One; 2012, 7 (8):

Introduction: Rotavirus vaccine efficacy ranges from &90% in high socio-economic settings (SES) to 50% in low SES. With the imminent introductionof rotavirus vaccine in low SES countries, understanding reasons

for reduced efficacy inthese settings could identify strategies to improve vaccine performance. Methods: We developed a mathematical model to predict rotavirus vaccine efficacy in high, middle and low SES based on data specific for each setting on incidence, protection conferred by natural infection and immune response to vaccination. We then examined factors affecting efficacy. Results: Vaccination was predicted to prevent 93%, 86% and 51% ofsevere rotavirus gastroenteritis in high, middle and low SES, respectively. Also predicted was that vaccines are most effective against severe disease and efficacy declines with age in low but not high SES. Reduced immunogenicity of vaccination and reducedprotection conferred by natural infection are the main factors that compromise efficacyin low SES. Discussion: The continued risk of severe disease in non-primary natural infections in low SES is a key factor underpinning reduced efficacy of rotavirus vaccines. Predicted efficacy was remarkably consistent with observed clinical trial results from different SES, validating the model. The phenomenon of reduced vaccine efficacy can be predicted by intrinsic immunological and epidemiological factors of low SES populations. Modifying aspects of the vaccine (e.g. improving immunogenicity in low SES) and vaccination program (e.g. additional doses) may bring improvements.**Address:** National Center for Immunization and Respiratory Diseases, Centers forDisease Control and Prevention, Atlanta, GA, United StatesDepartment of Ecology and Evolutionary Biology, Princeton University, Princeton, NJ, United StatesFogarty International Center, National Institutes of Health, Bethesda, MD, United StatesDepartment of Gastrointestinal Sciences, Christian Medical College, Vellore, Tamil Nadu, IndiaMRC Center for Outbreaks Analysis and Modelling, Imperial College London, London,United KingdomDepartment of Infectious Disease Epidemiology, London School of Hygiene and TropicalMedicine, London, United Kingdom

Intl PMID:22879893 EPH

Millogo, A., Nitiéma, P., Carabin, H., Boncoeur-Martel, M. P., Rajshekhar, V., Tarnagda, Z., Praet, N., Dorny, P., Cowan, L., Ganaba, R., Hounton, S., Preux, P. M. and Cissé, R.
Prevalence of neurocysticercosis among people with epilepsy in rural areas of BurkinaFasoEpilepsia; 2012, 53 (12): 2194-2202

Purpose: To estimate the lifetime prevalence of neurocysticercosis (NCC)-associated epilepsy and the proportion of NCC among people with epilepsy in three Burkina Fasovillages. Methods: Three villages were selected to represent three types of pig-rearingmethods: (1) Batondo, where pigs are left to roam; (2) Pabré, where pigs are mostly tethered or penned; and (3) Nyonyogo, where the majority of residents are Muslim and few pigs are raised. In Batondo and Nyonyogo, all concessions (a group of several households) were included. Half of the concessions in Pabré were randomly chosen. All households of selected concessions were included, and one person per household was randomly selected for epilepsy screening and serologic testing for cysticercosis. Self- reported cases of epilepsy were also examined and confirmed cases included in analyses other than the estimate of NCC-associated epilepsy prevalence. Epilepsy was defined as ever having had more than one episode of unprovoked seizures. Individuals with medically confirmed epilepsy had a computerized tomography (CT) scan of the brain before and after contrast medium injection. The diagnosis of NCC was made using a modification of the criteria of Del Brutto et al. Key Findings: Thirty-nine (4%) of 888 randomly selected villagers and 33 (94%) of 35 self-reported seizures cases were confirmed to have epilepsy by medical examination. Among the 68 participants with epilepsy who had a CT scan, 20 patients were diagnosed with definitive or probable NCC for a proportion of 46.9% (95% confidence interval [CI] 30.2-64.1) in Batondo and45.5% (95% CI 19.0-74.1) in Pabré. No cases of NCC were identified in Nyonyogo. Significance: All the definitive and probable cases of NCC were from the two villages where pig breeding is common. Prevention policies intended to reduce the burden of epilepsy in this country should include measures designed to interrupt the life cycle of Taenia solium. © 2012 International League Against Epilepsy.**Address:** Department of Internal Medicine, Sourou Sanou University Hospital Center, Bobo-Dioulasso, Burkina FasoDepartment of Biostatistics and Epidemiology, College of Public Health, University ofOklahoma Health Sciences Center, 801 NE 13th St, Oklahoma City, OK 73104, UnitedStatesDiagnostic Neuroradiology, University Hospital Dupuytren, Limoges, FranceDepartment of Neurological Sciences, Christian Medical College, Vellore, India, Health

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Intl PMID:23148555 EPH

Moorthy, M., Samuel, P., Peter, J. V., Vijayakumar, S., Sekhar, D., Verghese, V. P., Agarwal, I., Moses, P. D., Ebenezer, K., Abraham, O. C., Thomas, K., Mathews, P.,Mishra, A. C., Lal, R., Muliyil, J. and Abraham, A. M.

Estimation of the Burden of Pandemic(H1N1)2009 in Developing Countries: Experience from a Tertiary Care Center in South IndiaPLoS One; 2012, 7 (9):

Background: The burden of the pandemic (H1N1) 2009 influenza might be underestimated if detection of the virus is mandated to diagnoseinfection. Using an alternate approach, we propose that a much higher pandemic burden was experienced in our institution. Methodology/Principal Findings: Consecutive patients(n = 2588) presenting to our hospital with influenza like illness (ILI) or severe acute respiratory infection (SARI) during a 1-year period (May 2009-April 2010) wereprospectively recruited and tested for influenza A by real-time RT-PCR. Analysis of weekly trends showed an 11-fold increase in patients presenting with ILI/SARI duringthe peak pandemic period when compared with the pre-pandemic period and a significant (P<0.001) increase in SARI admissions during the pandemic period (30±15.9admissions/week) when compared with pre-pandemic (7±2.5) and post-pandemic periods (5±3.8). However, Influenza A was detected in less than one-third of patientswith ILI/SARI [699 (27.0%)]; a majority of these (557/699, 79.7%) were Pandemic(H1N1)2009 virus [A/H1N1/09]. An A/H1N1/09 positive test was correlated with shorter symptom duration prior to presentation (p = 0.03). More ILI cases tested positive for A/H1N1/09 when compared with SARI (27.4% vs. 14.6%, P = 0.037). When the entire study population was considered, A/H1N1/09 positivity was associated with lower risk of hospitalization (p<0.0001) and ICU admission (p = 0.013) suggesting mild self-limiting illness in a majority. Conclusion/Significance: Analysis of weekly trends of ILI/SARI suggest a higher burden of the pandemic attributable to A/H1N1/09 than estimates assessed by a positive PCR test alone. The study highlights methodological consideration in the estimation of burden of pandemic influenza in developing countries using hospital- based data that may help assess the impact of future outbreaks of respiratory illnesses.© 2012 Moorthy et al.**Address:** Department of Clinical Virology, Christian Medical College, Vellore, TamilNadu, IndiaDepartmentof Biostatistics, Christian Medical College, Vellore, Tamil Nadu, India, Department of Child Health, Christian Medical College, Vellore, Tamil Nadu, IndiaDepartment of Medicine, Christian Medical College, Vellore, Tamil Nadu, IndiaChristian Medical College, Vellore, Tamil Nadu, IndiaNational Institute of Virology, Pune, Maharashtra, IndiaInfluenza Division, National Center for Immunization and Resppiratory Diseases, Centers for Disease Control and Prevention, Atlanta, GA, United States

Intl PMID:22957015 EPH

Morris, S. K., Awasthi, S., Khera, A., Bassani, D. G., Kang, G., Parashar, U. D., Kumar, R., Shet, A., Glass, R. I. and Jha, P.

Rotavirus mortality in India: Estimates based on a nationally representative survey ofdiarrhoeal deathsLa mortalité du rotavirus en Inde: Estimations fondáes sur une enquête nationale représentative des décés par diarrheáe; 2012, 90 (10): 720-727

Objective To estimate the number of rotavirus-associated deaths among Indian children younger than five years. Methods We surveyed more than 23 000 child deaths from anationally representative survey of 1.1 million Indian households during 2001-2003. Diarrhoeal deaths were characterized by region, age and sex and were combined withthe proportion of deaths attributable to rotavirus, as determined by hospital microbiologic data collected by the Indian Rotavirus Strain Surveillance Network fromDecember 2005 to November 2007. Rotavirus vaccine efficacy data from clinical trials in developing countries were used to estimate the number of deaths preventable

by anational vaccination programme. Data were analysed using Stata SE version 10. Findings Rotavirus caused an estimated 113 000 deaths (99% confidence interval, CI:86 000-155 000); 50% (54 700) and 75% (85 400) occurred before one and two years of age, respectively. One child in 242 died from rotavirus infection before five years ofage. Rotavirus-associated mortality rates overall, among girls and among boys were4.14 (99% CI: 3.14-5.68), 4.89 (99% CI: 3.75-6.79) and 3.45 (99% CI: 2.58-4.66) deaths per 1000 live births, respectively. Rates were highest in Bihar, Uttar Pradesh and Madhya Pradesh, which together accounted for > 50% of deaths (64 400) nationally. Rotavirus vaccine could prevent 41 000-48 000 deaths among children aged 3-59 months. Conclusion The burden of rotavirus-associated mortality is high among Indian children, highlighting the potential benefits of rotavirus vaccination.**Address:** Division of Infectious Diseases, Hospital for Sick Children, University ofToronto, 555 University Ave, Toronto, ON M5G1X8, CanadaDepartment of Paediatrics, King George's Medical University, Lucknow, IndiaMinistry of Health and Family Welfare, Government of India, New Delhi, India Department of Paediatrics, Hospital for Sick Children, University of Toronto, Toronto, CanadaChristian Medical College, Vellore, IndiaNational Center for Immunization and Respiratory Diseases, Centers for Disease Control, and Prevention, Atlanta, United StatesSchool of Public Health, Post Graduate Institute of Medical Education, Chandigarh, India Department of Paediatrics, St John's National Academy of Health Sciences, Bangalore, IndiaFogarty International Center, Bethesda, United StatesCentre for Global Health Research, Li Ka Shing Knowledge Institute, St Michael'sHospital, University of Toronto, Toronto, Canada

Intl EPH

Peter Cv, D., George, L. and Pulimood, S. A.

Trichoscopic features of various types of alopecia areata in India: Application of a hand- held dermoscope<u>Australas J Dermatol.</u> 2012 Sep 4. doi: 10.1111/j.1440-0960.2012.00942.x. [Epub ahead of print]

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Intl PMID:22943070 EPH

Prince, M., Brodaty, H., Uwakwe, R., Acosta, D., Ferri, C. P., Guerra, M., Huang, Y., Jacob, K., Llibre Rodriguez, J. J., Salas, A., Sosa, A. L., Williams, J. D., Jotheeswaran, A.T. and Liu, Z.

Strain and its correlates among carers of people with dementia in low-income and middle-income countries. A 10/66 Dementia Research Group population-based survey International Journal of Geriatric Psychiatry; 2012, 27 (7): 670-682

Objectives In a multi-site population-based study in several middle-income countries,we aimed to investigate relative contributions of care arrangements and characteristics of carers and care recipients to strain among carers of people with dementia. Based on previous research, hypotheses focused on carer sex, care inputs, behavioural and psychological symptoms (BPSD) and socioeconomic status, together with potential buffering effects of informal support and employing paid carers. Methods In population- based catchment area surveys in 11 sites in Latin America, India and China, we analysed data collected from people with dementia and care needs, and their carers. Carer strain was assessed with the Zarit Burden Interview. Results With 673 care recipient/carer dyads interviewed (99% of those eligible), mean Zarit Burden Interview scores ranged between 17.1 and 27.9 by site. Women carers reported more strain than men. The most substantial correlates of carer strain were primary stressors BPSD, dementia severity, needs for care and time spent caring. Socioeconomic status was not associated with carer strain. Those cutting back on work experienced higher strain.There was tentative evidence for a protective effect of having additional informal or paid support. Conclusions Our findings underline the global impact of caring for a person with dementia and support the need for scaling up carer support, education and training.That giving up work to care was prevalent and associated with substantial increased strain emphasizes the economic impact of caring on the household. Carer benefits, disability benefits for people with dementia and respite care should all be considered.Copyright © 2012 John Wiley & Sons, Ltd.**Address:** King's College London, Institute of Psychiatry, Health Service and PopulationResearch Department, London, United KingdomDementia Collaborative Research Centre, School of Psychiatry, University of New SouthWales, Sydney, NSW, AustraliaNnamdi Azikiwe University, Teaching Hospital,

Anambra State, Nnewi, Nigeria, Universidad Nacional Pedro Henriquez Ureña (UNPHU), Internal Medicine Department, Geriatric Section, Santo Domingo, Dominican RepublicUniversidad Peruana Cayetano Heredia, Instituto de la Memoria y DesordenesRelacionados, Lima, PeruPeking University, Key Laboratory of Mental Health, Ministry of Health, Beijing, ChinaChristian Medical College, Vellore, IndiaFacultad de Medicina Finley-Albarran, Medical University of Havana, Havana, CubaMedicine Department, Caracas University Hospital, Universidad Central de Venezuela, Caracas, VenezuelaCognition and Behavior Unit, National Institute of Neurology and Neurosurgery ofMexico, Autonomous National University of Mexico, Delegacion Tlalpan, Mexico City, MexicoVoluntary Health Services, Chennai, IndiaPublic Health Foundation for India, New Delhi, India

Intl PMID:22460403 EPH

Ravindran, V., Rempel, G. R. and Ogilvie, L.

Parenting burn-injured children in India: A grounded theory studyInt J Nurs Stud. 2012 Jul 13. [Epub ahead of print]

Background: Burn injury is one of the major traumas that a child can experience.Parents of burn-injured children experience anxiety, depression, guilt and post traumatic stress disorders as they care for their burn-injured children. Such empirical evidencerelated to effects of burns on parents and parenting process is unavailable from low andmiddle income countries like India. Objectives: The aim of the study was to discover the process of parenting burn-injured children in India. The objective of this paper is to present one of the substantive processes “Enduring the Blame” that emerged from the data. Design: Constructivist grounded theory methodology was used to explore the experiences of parenting burn-injured children. Setting: The study was conducted through a tertiary hospital that provided advanced paediatric burn care in a town in South India. Participants: Nine mothers, nine fathers, three grandmothers and one aunt from 12 families of children who were 15 years or younger and had sustained greater than 20% total body surface burns were purposively included. Methods: Twenty-two semi structured individual or family interviews were conducted in Tamil over a period of one year. The interview started with an overview question and then was followed by trigger questions as the participants shared their experiences. Second interviews were conducted with three participants in three families for theoretical saturation purposes. Results: Mothers and fathers encountered blame from family members, healthprofessionals, strangers, and their burn-injured children along the burn injury trajectory. They suffered double trauma of their child’s burn and the blame. Parenting their burn- injured child involved a process of “Enduring the Blame.” Enduring the Blame included four stages: internalizing blame, submitting to blame, rising above blame, and avoiding blame. Conclusions: Encouraging and assisting parents in caring for their childreninstead of blaming is a vital component of paediatric burn care. Parents will benefit from ongoing assessment and psychological interventions that will provide emotional support. Studying the perceptions of health professionals and the burn-injured children will helpin further clarification of blame related issues and developing a parenting theory. **Address:** University of Alberta, Edmonton, CanadaCollege of Nursing, Christian Medical College, Vellore, IndiaFaculty of Nursing, Population Health Investigator, Alberta Heritage Foundation forHealth Research, University of Alberta, Edmonton, CanadaFaculty of Nursing, Prairie Metropolis Centre, University of Alberta, Edmonton, Canada

Intl PMID:22795907 EPH

Samuel, P., Antonisamy, B., Raghupathy, P., Richard, J. and Fall, C. H. D.

Socio-economic status and cardiovascular risk factors in rural and urban areas ofVellore, Tamilnadu, South IndiaInt J Epidemiol. 2012 Oct;41(5):1315-27. doi: 10.1093/ije/dys001. Epub 2012 Feb 24.

Background We examined associations between socio-economic status (SES) indicators and cardiovascular disease (CVD) risk factors among urban and rural South Indians. Methods Data from a population-based birth cohort of 2218 men and women aged 26-32 years from Vellore, Tamilnadu were used. SES indicators included a household possessions score, attained education and paternal education. CVD risk factors included obesity, hypertension, impaired glucose tolerance or diabetes, plasma total

cholesterol to high density lipoprotein (HDL) ratio and triglyceride levels and consumption oftobacco and alcohol. Multiple logistic regression analysis was used to assess associations between SES indicators and risk factors. Results Most risk factors were positivelyassociated with possessions score in urban and rural men and women, except fortobacco use, which was negatively associated. Trends were similar with the participants' own education and paternal education, though weaker and less consistent. In a concurrent analysis of all the three SES indicators, adjusted for gender and urban/rural residence, independent associations were observed only for the possessions score. Compared with those in the lowest fifth of the score, participants in the highest fifth had a higher risk of abdominal obesity [odds ratio (OR) = 6.4, 95% CI 3.4-11.6], high total cholesterol to HDL ratio (OR = 2.4, 95% CI 1.6-3.5) and glucose intolerance (OR = 2.8,95% CI 1.9-4.1). Their tobacco use (OR = 0.4, 95% CI 0.2-0.6) was lower. Except for hypertension and glucose intolerance, risk factors were higher in urban than rural participants independently of SES. Conclusion In this young cohort of rural and urban south Indians, higher SES was associated with a more adverse CVD risk factor profile but lower tobacco use. Published by Oxford University Press on behalf of the International Epidemiological Association © The Author 2012; all rights reserved. **Address:** Department of Biostatistics, Christian Medical College, Vellore, Tamilnadu, IndiaDepartment of Child Health, Christian Medical College, Vellore, Tamilnadu, India MRC Lifecourse Epidemiology Unit, Southampton General Hospital, University of Southampton, Southampton, United Kingdom

Intl PMID:22366083 EPH

Shavro, S. A., Ezhilarasu, P., Augustine, J., Bechtel, J. J. and Christopher, D. J.

Correlation of health-related quality of life with other disease severity indices in Indianchronic obstructive pulmonary disease patientsInternational journal of chronic obstructive pulmonary disease; 2012, 7 291-296

Improvement in quality of life (QOL) has become a focus for the management of incurable chronic diseases, including chronic obstructive pulmonary disease (COPD).This study investigates factors influencing the QOL of patients with COPD in India.Seventy-three consecutive COPD patients visiting an outpatient pulmonary clinic underwent health-related QOL (HRQOL) assessment using the World Health Organization's QOL abbreviated questionnaire and St George's Respiratory Questionnaire (SGRQ). Symptom severity and grade of dyspnea were estimated by the Chronic Lung Disease Severity Index (CLD) and Medical Research Council assessments, and patient demographic data were collected. Spirometry and 6-minute walk tests were performed to assess lung function and functional status. Patients with COPD showed significantly reduced HRQOL when measured by the World Health Organization's QOLabbreviated questionnaire and the SGRQ. CLD estimate for severity of lung disease ($P < 0.001$), Medical Research Council assessment for dyspnea ($P < 0.01$), and duration of illness ($P < 0.05$) showed close correlation with HRQOL. Worsening forced expiratoryvolume in 1 second and 6-minute walk test results closely correlated with poorer HRQOL($P < 0.01$). No association between QOL and age, quantum of smoking, education, comorbid illnesses, or occupational exposure was found. This study showed that Indian patients with COPD had reduced HRQOL. Longer disease duration, patient perception of disease severity, and worsening dyspnea impacted negatively on HRQOL.**Address:** College of Nursing, Christian Medical College, Vellore, South India.

Intl PMID:22615528 EPH

Anbumani, N., Anilkumar, V., Manoharan, A., Menon, T., Kalyani, J. and Mallika, M.

Antimicrobial resistance and genetic diversity among enterococcal isolates from a tertiary care hospitalBiomedicine; 2012, 32 (1): 72-75

Background: Enterococcus has become an important nosocomial pathogen by virtue of their versatile genetic machinery enabling them to exhibit intrinsic, as well, acquired resistanceto several antimicrobials. The aminoglycoside resistant enterococci may exhibit versatility in their genetic mechanism to encode resistance to a single antimicrobial in more than oneway; hence genotypic analysis helps in detecting the genetic basis of antimicrobial resistance. Objectives: The aim of this study is: to detect antimicrobial resistance and tostudy the molecular epidemiology, with reference to high-level aminoglycoside resistance,of enterococci. Methods: In the present study, a total of 396 enterococci were isolated from various clinical specimens in the Department of Microbiology, in a tertiary care hospital in south India, during the period from September 2003 to August 2004. The isolates were identified to the species level by conventional biochemical and microbiological tests, and assayed for their susceptibilities to antimicrobial agents. The genetic diversity of antimicrobial resistant strains was evaluated by pulsed-field gel electrophoresis (PFGE) analysis of Sma I restricted chromosomal DNA. Results: The most frequent species was Enterococcus faecalis (79.79%). Other species identified were: E. faecium (11.11%), and3% each of E. gallinarum, E. hirae and E. casseliflavus. The overall prevalence of isolates with high-level resistance (HLR) to aminoglycosides was 56%. No strains with acquired resistance to vancomycin were found. PFGE analysis showed the predominance of clonal group A, comprising strains isolated from different clinical specimens. Conclusion: These results suggest an intrahospital dissemination of one predominant clonal group of E. faecalis isolates with HLR to gentamicin in the hospitals.**Address:** Department of Microbiology, Sri Ramachandra University, Porur, Chennai-600116, Tamilnadu, IndiaDepartment of Microbiology, Amrita Institute of Medical Sciences, Ponekara, Kochi -682041, Kerala, IndiaInfectious Diseases Training and Research Centre, Department of Medicine Unit I and Infectious Diseases, Christian Medical College, Vellore-632004, Tamilnadu, India Department of Microbiology, Dr. ALM PGIBMS, Taramani, Chennai-600113, Tamilnadu,India

Intl BS

Anuradha, C., Mittal, R., Yacob, M., Manipadam, M. T., Kurian, S. and Eapen, A.

Eosinophilic disorders of the gastrointestinal tract: Imaging featuresDiagnostic and Interventional Radiology; 2012, 18 (2): 183-188

Eosinophilic disorders of the gastrointestinal tract are increasingly rare but remain an important cause of long-standing gastrointestinal symptoms. Diagnosis is usually delayed because the disease mimics other inflammatory disorders and is often not suspectedinitially. We report a series of four cases to highlight the various imaging appearances ofthis condition. Two patients presented with upper gastrointestinal involvement, one patient presented with small and large bowel involvement, and one patient presented with diffuse involvement of the entire gastrointestinal tract. © Turkish Society of Radiology 2012. **Address:** Departments of Radiology, Christian Medical College, Vellore, Tamil Nadu, India Departments of Surgery, Christian Medical College, Vellore, Tamil Nadu, IndiaDepartments of Pathology, Christian Medical College, Vellore, Tamil Nadu, India

Intl PMID:21948696 BS

Aslanidi, G. V., Rivers, A. E., Ortiz, L., Govindasamy, L., Ling, C., Jayandharan, G. R., Zolotukhin, S., Agbandje-Mckenna, M. and Srivastava,

A.High-efficiency transduction of human monocyte-derived dendritic cells by capsid-modifiedrecombinant AAV2 vectorsVaccine; 2012, 30 (26): 3908-3917

Phosphorylation of surface-exposed tyrosine residues negatively impacts the transduction efficiency of recombinant AAV2 vectors. Pre-treatment of cells with specific cellularserine/threonine kinase inhibitors also significantly increased the transduction efficiency ofAAV2 vectors. We reasoned that site-directed mutagenesis of surface-exposed serine residues might allow the vectors to evade phosphorylation and thus lead to higher transduction efficiency. Each of the 15 surface-exposed serine (S) residues was substituted with valine (V) residues, and the transduction efficiency of three of these mutants, S458V, S492V and S662V, was increased by up to 20-

fold in different cell types. The S662V mutant was efficient in transducing human monocyte-derived dendritic cells (moDCs), a cell type not readily amenable to transduction by the conventional AAV vectors, and did not induce any phenotypic changes in these cells. Recombinant S662V-AAV2 vectors encoding a truncated human telomerase (hTERT) gene were generated and used to stimulate cytotoxic T cells (CTLs) against target cells. S662V-AAV2-hTERT vector-transduced DCs resulted in rapid, specific T-cell clone proliferation and generation of robust CTLs, which led to specific cell lysis of K562 cells. These studies suggest that high-efficiency transduction of moDCs by serine-modified AAV2 vectors is feasible, which supports the potential utility of thesevectors for future human DCs vaccine studies. © 2012 Elsevier Ltd.**Address:** Division of Cellular and Molecular Therapy, Department of Pediatrics, University of Florida, College of Medicine, Gainesville, FL, United StatesPowell Gene Therapy Center, University of Florida, College of Medicine, Gainesville, FL, United StatesDepartment of Biochemistry and Molecular Biology, University of Florida, College ofMedicine, Gainesville, FL, United StatesDepartment of Molecular Genetics and Microbiology, University of Florida, College ofMedicine, Gainesville, FL, United StatesGenetics Institute, University of Florida, College of Medicine, Gainesville, FL, United StatesShands Cancer Center, University of Florida, College of Medicine, Gainesville, FL, UnitedStatesDepartment of Haematology and Centre for Stem Cell Research, Christian Medical College, Vellore, Tamil Nadu, India

Intl PMID:22497875 BS

Chandramohan, A., Ramakrishna, B. and Venkatramani, S.

Formula for calculating standard liver volume in IndiansIndian Journal of Gastroenterology; 2012, 31 (1): 15-19

Aim: To assess the validity of standard liver volume (SLV) calculated using various formulae in the Indian population. Methods: Data on liver weights of 366 cadavers with no intrinsic liver disease were obtained retrospectively from autopsy records. From these, liver volume (LV) was calculated using the density of formalin-preserved livers, measured prospectivelyin 15 livers. These volumes were compared with SLV estimated using various formulae. Results: The liver density was found to be 1. 162 kg/L. Median (range) age of 366autopsied cadavers (M:F = 274:92) was 49 [18-70] years. Median (range) body surfacearea (BSA) and LV was 1. 66 (1. 25-2. 12) square meter and 1,205 (685. 3-2102) cc, respectively. There was poor agreement between LV obtained from autopsy data and SLV estimated using formulae derived from the Indians (Indian Model 1: ICC = -0. 069, p = 0.655; Indian Model 2: ICC = -0. 07015, p = 0. 879; Indian Model 3: ICC = -0. 06253, p =0. 043), Koreans (ICC = -0. 07114, p = <0. 0001), Chinese (ICC = -0. 0286, p = <0.0001) and Johnson Model (ICC = -0. 05764, p = <0. 0001). Median difference between the actual LV and SLV as estimated by the Indian Models 1 and 2 are least (29 cc and 6 cc, respectively) and this was followed by Johnson and the Korean Models (149. 9 cc and 158.7 cc, respectively). Median difference was the highest with the Indian Model 3 (475. 9 cc), followed by Chinese Model (-209. 8 cc). Conclusions: There is poor correlation between thetotal LV and SLV obtained by various formulae and none are valid in assessing SLV inIndian population. © 2012 Indian Society of Gastroenterology.**Address:** Department of Radiology, Christian Medical College, Vellore, Tamil Nadu 632 004, IndiaDepartment of Pathology, Christian Medical College, Vellore, Tamil Nadu 632 004, IndiaDepartment of Hepatobiliary Surgery, Christian Medical College, Vellore, Tamil Nadu 632004, India

Nat PMID:22350818 BS

Christudoss, P., Selvakumar, R., Pulimood, A. B., Fleming, J. J. and Mathew, G.

Zinc and zinc related enzymes in precancerous and cancerous tissue in the colon ofdimethyl hydrazine treated ratsAsian Pacific Journal of Cancer Prevention; 2012, 13 (2): 487-492

Trace element zinc deficiency or excess is implicated in the development or progression of some cancers. The exact role of zinc in the etiology of colon cancer is unclear. To cast lighton this question, an experimental model of colon carcinogenesis was applied here. Six weekold rats were given sub cutaneous injections of DMH (30 mg/kg body weight) twice a week for three months and sacrificed after 4 months (precancer model) and 6 months (cancer model). Plasma zinc levels

showed a significant decrease (p<0.05) at 4 months and a greater significant decrease at 6 months (p<0.01) as compared with controls. In the large intestine there was a significant decrease in tissue zinc levels (p<0.005) and inCuZnSOD, and alkaline phosphatase activity (p<0.05) in the pre-cancerous model and a greater significant decrease in tissue zinc (p<0.0001), and in CuZnSOD and alkaline phosphatase activity (p<0.001), in the carcinoma model. The tissue zinc levels showed a significant decrease in the small intestine and stomach (p<0.005) and in liver (p<0.05) in the cancer model. 87%of the rats in the precancer group and 92% rats in the cancer group showed histological evidenceof precancerous lesionsand carcinomas respectively in the colon mucosa. This study suggests that the decrease in plasma zinc, tissue zinc and activity of zinc related enzymes are associated with the development of preneoplastic lesions and these biochemical parameters further decrease with progression to carcinoma in the colon. **Address:** Department of Clinical Biochemistry, Christian Medical College, Vellore, Tamil nadu, IndiaDepartment of GI Sciences, Christian Medical College, Vellore, Tamil nadu, IndiaDepartment of General Surgery, Christian Medical College, Vellore, Tamil nadu, India

Intl PMID:22524812 BS

Das, S., Bellare, J. R. and Banerjee, R.

Protein based nanoparticles as platforms for aspirin delivery for ophthalmologic applicationsColloids and Surfaces B: Biointerfaces; 2012, 93 161-168

Most conventional ophthalmic dosage forms, though simplistic are limited by poor bioavailability in the posterior chamber of the eye. Application of nanotechnology has thepotential to overcome this problem. By varying aspirin albumin ratios from 0.06 to 1.0, weobtained electrokinetically stable, pharmacologically active albumin based aspirin nanoparticles of <200. nm diameter with low polydispersity. In vitro release study showed nanoparticle formulation can release aspirin at a sustained rate for prolonged duration(90% at 72. h) and 11% drug release in the posterior chamber over a period of 72. h under simulated condition. Stability of the formulation was well maintained on storage for six months and after reconstitution for 24. h. The formulation showed no hemolysis in contrastto the high hemolysis due to the free drug. This study shows that aspirin loaded albuminnanoparticles prepared by coacervation holds promise as a formulation for topical delivery in diabetic retinopathy. © 2012 Elsevier B.V.**Address:** Department of Biosciences and BioEngineering, Indian Institute of TechnologyBombay, IndiaDepartment of Chemical Engineering, Indian Institute of Technology Bombay, IndiaDepartment of Radiation Oncology, Christian Medical College, Vellore 632004, India

Intl BS

Das, S., John, S., Ravindran, P., Isiah, R., B, R., Backianathan, S. and Singh, R. R.

Comparison of geometric uncertainties between alpha cradle and thermoplastic ray cast immobilisation in abdominopelvic radiotherapy: A prospective studyJournal of Radiotherapy in Practice; 2012, 11 (4): 239-248

Context: Setup error significantly affects the accuracy of treatment and outcome in high precision radiotherapy. Aims: To determine total, systematic, random error and clinical target volume (CTV) to planning target volume (PTV) margin with alpha cradle (VL) and ray cast (RC) immobilisation in abdominopelvic region. Methods and material: Setup error was compared by using digitally reconstructed radiograph (DRR) as reference image with electronic portal image (EPI) taken during the treatment. Statistical analysis used: The total errors in mediolateral (ML), craniocaudal (CC) and anteroposterior (AP) directions were compared by t-test. For systematic and random errors variance ratio test (F-statistics) was used. Margins were calculated using International Commission of Radiation Units (ICRU), Stroom's and van Herk's formula. Results: A total number of 306 portal images were analysed with 144 images in RC group and 162 images in VL group. For VL, in ML, CC, AP directions systematic errors were, in cm, (0.45, 0.29, 0.41), random errors (0.48, 0.32,0.58), CTV to PTV margins (1.24, 0.80, 1.25), respectively. For RC, systematic errors were(0.25, 0.37, 0.80), random error (0.46, 0.80, 0.33), CTV to PTV margins (0.82, 1.30,1.08), respectively. The difference of random error in CC and AP directions were statistically significant. Conclusions: Geometric errors and CTV to PTV margins are different in different

directions. For abdomen and pelvis in VL immobilisation, the margin ranged from 8 mm to12.4 mm and for RC it was 8.2 mm to 13 mm. Therefore, a margin of 10 mm with onlinecorrection would be adequate. © 2011 Cambridge University Press.**Address:** Department of Radiation Oncology, Christian Medical College Vellore, India

Intl BS

David, K. S. and Krishnan, V.

Extension Injuries of the Cervical SpineSeminars in Spine Surgery; 2012,

Extension injuries of the cervical spine can result in a wide spectrum of clinical presentations. The very young as well as the elderly population may be uniquely predisposed to this group of injuries. Radiographic signs are often subtle, and therefore, a high index of suspicion followed by careful clinical examination and appropriate radiological evaluation are mandatory to minimize the danger of missing the diagnosis. Accurately identifying specific radiological injury patterns can ensure that appropriate treatment measures are promptly instituted, thereby potentially promoting the chances of recovery. © 2012 Elsevier Inc. All rights reserved.**Address:** Spinal Disorders Surgery Unit, Department of Orthopaedic Surgery, ChristianMedical College Hospital, Vellore, Tamil Nadu, India

Intl BS

David, S., Sachithanandham, J., Jerobin, J., Parasuram, S. and Kannangai, R.

Comparison of HIV-1 RNA level estimated with plasma and DBS samples: A pilot study fromIndia (South)Indian Journal of Medical Microbiology; 2012, 30 (4): 403-406

Purpose: The use of dried blood spots (DBS) for HIV-1 viral load determination could greatly enhance the management of HIV infected individuals in resource-limited countries. Objective: To compare the HIV-1 viral load values obtained between parallel collected plasma and DBS. Materials and Methods: DBS and plasma samples were collected from 62HIV-1 infected individuals and were used for determination of HIV-1 RNA concentrations using the Abbot real-time HIV-1 PCR. Result: Mean of the log difference of viral load values between plasma and DBS was -0.41 log. DBS viral load values significantly correlated with plasma viral load (r = 0.9818, P < 0.0001). Conclusion: These results suggest that DBS samples can be used as an alternative to plasma for the estimation of HIV-1 viral load if samples are appropriately stored.**Address:** Department of Clinical Virology, Christian Medical College, Vellore, Tamil Nadu-632004, India

Intl PMID:23183463 BS

Edison, E. S., Sathya, M., Rajkumar, S. V., Nair, S. C., Srivastava, A. and Shaji, R. V.

A novel â-globin gene mutation HBB.c.22G>C produces a hemoglobin variant (Hb Vellore)mimicking HbS in HPLCInternational Journal of Laboratory Hematology; 2012, 34 (5): 556-558

Hemoglobinopathies are highly prevalent in Indian population. DNA analysis to detect causative mutations is required for identifying rare hemoglobin variants or when hematological results are discordant with the clinical phenotype. In this report, we describe a novel hemoglobin variant caused by a mutation in beta-globin gene, Codon 7 GAG'!CAG (Glu'!Gln) that elutes in the position of sickle haemoglobin (HbS) in cation exchange high performance liquid chromatography. This report highlights possible diagnostic pitfalls in interpreting data solely based on haemoglobin analysis and usefulness of mutationscreening in definitive diagnosis of hemoglobinopathies. © 2012 Blackwell Publishing Ltd.**Address:** Department of Haematology, Christian Medical College, Vellore, India Department of Immunohaematology and Transfusion Medicine, Christian Medical College, Vellore, India

Intl PMID:22471768 BS

Edison, E. S., Venkatesan, R. S., Govindanattar, S. D., George, B. and Shaji, R. V.

A novel 26 bp deletion [HBB: C.20-45del26bp] in exon 1 of the â-globin gene causing â- thalassemia majorHemoglobin; 2012, 36 (1): 98-102

Molecular characterization of â-thalassemia (â-thal) is essential in prevention and in understanding the biology of the disease. Deletion mutations are relatively uncommon in â- thal. In this report, we describe a novel 26 bp deletion from codon 6 to codon 14 in the â-globin in a consanguineous family from

Tamil Nadu, India. This novel mutation causes ashift in the normal reading frame of the â-globin coding sequence, and consequently, a premature chain termination of translation due to the creation of a stop codon at the position of codon 21. The identification of this novel deletional mutation adds to the repertoire of â-thal mutations in India. © 2012 Informa Healthcare USA, Inc.**Address:** Department of Haematology, Christian Medical College, Vellore, Tamil Nadu, India

Intl PMID:22233277 BS

Gaddam, S. S. K., Santhi, V., Babu, S., Chacko, G., Baddukonda, R. A. and Rajshekhar, V.

Gross and microscopic study of the filum terminale: Does the filum contain functional neural elements? Laboratory investigationJournal of Neurosurgery: Pediatrics; 2012, 9 (1): 86-92

Object. The filum terminale (FT) is considered a fibrous structure that extends from conus medullaris of the spinal cord to coccyx. Based on previous studies and from their own experience with intraoperative electrophysiological monitoring of the sacral nervous system, the authors postulate that the FT contains functional neural elements in some individuals. Methods. The FT was dissected from 13 fresh stillborn cadavers (7 male, 6 female; mean gestational age 36 weeks and 1 day). The gross anatomical features were recorded, and connections between the FT and the nerve roots of the cauda equina were noted. These connections, when present, were sectioned for histological studies. The fila (both interna and externa) were also sectioned for histological and immunohistochemical studies. Inaddition, FT specimens were obtained from 5 patients undergoing sectioning of the FT in anuntethering surgical procedure. Results. There were 5 gross connections between the FT and nerve roots demonstrating nerve fibers that were positive for S100. The FT showed islands of cells that were positive for GFAP in 10 cases, synaptophysin in 3 cases, S100 in11 cases, and nestin in 2 cases. The nerve fibers in the FT were myelinated in 2 cases. The conus ended at the L-1 or L-2 vertebral level in all 13 specimens. The dural sac terminatedat the S-2 vertebral level in most of the specimens. The 5 FT specimens that were obtainedfrom patients revealed nerve bundles that were positive for S100 in 4 cases and cells that were positive for GFAP in 3 cases. Conclusions. There are gross anatomical connections between the FT and nerve roots that contain nerve fibers. Apart from fibrous stroma, the FT may contain nerve bundles and cells that stain positive for GFAP, synaptophysin, S100, and nestin. These microscopic findings and previous intraoperative electrophysiological studies suggest a probable functional role for the FT in some individuals. At birth, the conus ends at a higher vertebral level (lower L-1 or upper L-2) than L-3.**Address:** Department of Neurosurgery, Narayana Medical College, Nellore, IndiaDepartment of Pathology, Narayana Medical College, Nellore, IndiaSection of Neurophysiology, Department of Neurological Sciences, Christian MedicalCollege, Vellore, IndiaSection of Neuropathology, Department of Neurological Sciences, Christian Medical College, Vellore, IndiaSection of Neurosurgery, Department of Neurological Sciences, Christian Medical College,Vellore, India

Intl PMID:22208327 BS

George, S., Menon, V. K., Ramani, S. and Kang, G.

Comparison of primers for the detection of genogroup II noroviruses in IndiaIndian Journal of Medical Microbiology; 2012, 30 (1): 24-29

Purpose: Noroviruses (NoV) are increasingly recognized as an important cause for acute gastroenteritis, worldwide. Reverse transcription polymerase chain reaction (RT-PCR) and sequencing are the methods of choice for the detection of NoVs, but there is currently no consensus about the primers to be used in these assays. Materials and Methods: In this study, five published primer sets were evaluated for the detection of genogroup II (GII) NoVs in India. The primers target different regions of the NoV genome. Three primer sets detect an NoV in a single round RT-PCR platform, while the remaining two primer sets are based on a nested RT-PCR platform. Result: A panel of 100 samples from previous studies on norovirus diarrhoea in children were tested by all five primer sets. Of them, 74 samples were identified as positive for NoV, by at least one primer set. Subsets of positive amplicons were sequenced to check for specificity. Conclusion: The most sensitive primer set was Girish 2002, which detected GII NoV

by nested RT-PCR, and was modified from the previously published primers. This study demonstrates that higher detection can be obtained by either using multiple primer sets or using a sensitive nested RT-PCR assay. It also demonstrates the differences in primer sensitivity for detection of Genogroup II (GII)NoVs in India.**Address:** Department of Gastrointestinal Sciences, Christian Medical College, Vellore - 632004, India

Nat PMID:22361756 BS

Hussain, S. R., Raza, S. T., Babu, S. G., Singh, P., Naqvi, H. and Mahdi, F.

Screening of C-kit gene mutation in Acute Myeloid Leukaemia in Northern IndiaIranian Journal of Cancer Prevention; 2012, 5 (1): 27-32

Background: Acute Myeloid Leukaemia (AML) is a cancer of blood-forming cells in bone marrow. C-kit gene is a Receptor Tyrosine Kinase class III (RTK) that is expressed by early hematopoietic progenitor cells and plays an important role in hematopoietic stem cell proliferation, differentiation and survival. It is known that c-kit is a proto-oncogene and the activating c-kit mutations are likely to contribute in the development of leukaemia in humans. Exon 11 of c-Kit gene is the frequent site for mutations in different kinds of tumours. Methods: In order to determine the frequency and prevalence of exon 11 mutations in 51 AML cases, we have done polymerase chain reaction-single-strand conformational polymorphism followed by direct DNA sequencing. Results: The c-kit mutations in exon 11 were detected in 15.68% (8/51) in AML cases. We have detected totally ten missense mutations in eight AML cases those include Lys550Asn, Tyr568Ser, Ile571Leu, Tyr578Pro, Trp582Ser and Arg588Met and novel missense mutations at codons Ile563Lys and Val569Leu. Mutations at codons Ile571Leu and Trp582Ser was found in two independent cases. Conclusion: The presence of c-kit mutations in our study adds to investigative spectrum of AML cases. Since the c-kit mutations are seen in other malignancies, mutations in exon 11 of the c-kit gene might be involve in pathogenesis and represent useful predictive genetic marker in AML. Further studies in larger group of cases possibly will be required to determine the prognostic implications and to investigate howthese mutations are co-related to the progression and pathogenesis of AML.**Address:** Dept. of Biochemistry, Era's Lucknow Medical College and Hospital, Lucknow, IndiaDept. of Biotechnology, Babasaheb Bhimrao Ambedkar University, Lucknow, IndiaDept. of Pathology, Christian Medical College, Vellore, India

Intl BS

Jain, P., Aby, A., Ahmed, R., George, B., Mathews, V., Parihar, M., Auro, V., Srivastava, A. and Srivastava, V.

M.Fluorescence in situ hybridization patterns of BCR/ABL1 fusion in chronic myelogenousleukemia at diagnosisIndian Journal of Pathology and Microbiology; 2012, 55 (3): 347-351

Background : Chronic myelogenous leukemia (CML) is characterised by the t(9;22)(q34;q11.2) which results in the formation of the BCR/ABL1 fusion gene. Occasionally, the t(9;22) may be associated with submicroscopic deletions of chromosomes9 and/or 22 which appear to be associated with a worse prognosis. Three or four-way variant t(9;22) may also occur. All these changes as well as gain of the Philadelphiachromosome which represents disease progression can be detected by fluorescence in situhybridization (FISH) analysis. FISH analysis at presentation is used to determine the number of cells with BCR/ABL1 fusion and establish whether the patterns are typical or atypical. Response to therapy can then be monitored by serial testing. Patients and Methods : The study group consisted of all patients diagnosed or suspected to have CMLwho had interphase FISH analysis at presentation on peripheral blood/bone marrow using a commercially available BCR/ABL1 dual colour, dual fusion probe. The study was performedat a tertiary hospital in India between 2004 and 2010. Results: There were 1076 diagnosticsamples which were positive for BCR/ABL1 fusion. Typical dual fusion signals (two fusions, one red and one green, 2F1R1G) were seen in 801 cases (74 %). Atypical signal patterns were seen in 275 cases (26%). These were: 1F1R2G (4%), 1F2R1G (2.5%) and 1F1R1G (11%) representing deletions of the derivative 9 involving chromosome 9 sequences, chromosome 22 sequences, or both respectively; 3F1R1G (6.5%) usually representing gain of an additional Philadelphia chromosome and 1F2R2G (1%) representing a three-or four- way variant translocation. More than one signal pattern was seen in 1%. Conclusions: Our findings were

similar to the literature with respect to the distribution of signal patterns except that we had a lower number of patients with variant translocations. While each signal pattern is typically associated with a particular abnormality, there can be more than one explanation for each pattern. Hence, metaphase FISH analysis is the "gold standard" for the interpretation of signal patterns.**Address:** Cytogenetics Unit, Christian Medical College, Vellore-632 004. Tamilnadu, IndiaDepartment of Hematology, Christian Medical College, Vellore, Tamilnadu, IndiaDepartment of Cytogenetics, Tata Medical Centre, Kolkata, West Bengal, India

Nat PMID:23032829 BS

Jain, R., Puliyel, M., Moses, P. D. and Sieni, E.Novel STXBP2 mutation causing familial hemophagocytic lymphohistiocytosisIndian Pediatrics; 2012, 49 (6): 488-490

Familial Hemophagocytic Lymphohistiocytosis (FHL) is a rare autosomal recessive disorder. Diagnosis is established in presence of genetic mutation or positive family history in one ofthe siblings. Common genetic mutations associated with FHL are mutations in gene PRF-1(also known as FHL 2), UNC13D (FHL 3) and STX11 (FHL 4). Recently mutation in STXBP2 encoding syntaxin binding protein 2 (Munc 18 -2) has been found to be associated with FHL type 5. Here we describe the first reported Indian patient with homozygous mutation in STX BP2 gene (c1697 G>A resulting in amino acid change p.G566D) causing FHL 5.**Address:** Department of Pediatrics, Pediatrics Unit III, Christian Medical College, Vellore632 004, Tamilnadu, IndiaDepartment of Pediatric Hematology and Oncology, Anna Meyer Children's Hospital, Florence, Italy

Nat PMID:22796692 BS

Jain, S., Edison, E. S., Mathews, V. and Shaji, R. V. A novel ä-globin gene mutation (HBD: c.323G>A) masking the diagnosis of â-thalassemia: A first report from IndiaInternational Journal of Hematology; 2012, 95 (5): 570-572

An elevated HbA 2 (á2ä2) level (>3.5%) is a well-established diagnostic test for heterozygous â-thalassemia. Mutations in the ä-globin gene can cause decreased expression of HbA 2, resulting in heterozygous â-thalassemia with normal levels of HbA 2.In this report, we describe a novel missense mutation in ä-globin (HBD: c.323G>A, Gly> Asp) in an Indian family with heterozygous â-thalassemia with normal HbA 2 levels. © The Japanese Society of Hematology 2012.**Address:** Department of Haematology, Christian Medical College, Vellore, Tamilnadu, India

Intl PMID:22477537 BS

Joseph, G., Thomson, V. S. and Radhakrishnan, S. Corsair microcatheter for retrograde coronary chronic total occlusion recanalization: Early experience outside the realm of dedicated recanalization specialistsIndian Heart Journal; 2012, 64 (4): 388-393

Objective: To determine the extent to which use of the Corsair microcatheter (CM, Asahi Intecc Co., Japan) improves procedural outcomes when an experienced operator who is not a dedicated recanalization specialist attempts retrograde chronic total occlusion (CTO) recanalization through collateral channels during percutaneous coronary intervention. Background: The recently introduced CM has improved success rates of retrograde CTO recanalization to nearly 100% in the hands of dedicated coronary recanalization specialists; however, the impact the CM has on the results of non-specialist operators attempting retrograde CTO recanalization is not known. Methods: A non-specialist operator attempted CM-assisted recanalization in seven consecutive CTO cases requiring retrograde recanalization. The results obtained were compared with those achieved by the same operator in eleven consecutive retrograde CTO recanalization procedures during the last 2 years before the CM became available. Results: CM-assisted retrograde CTO recanalization was successful in 6 of 7 cases (86%), but failed in one case attempted through a tortuous epicardial collateral; there were no complications. In contrast, during the 2 years before the CM became available, retrograde CTO recanalization was successful in only 3 of 11 attempted cases (27%), and was asso- ciated with significant morbidity. Lesions in the twogroups were comparable in terms of technical difficulty and procedural risk. Conclusions:The non-specialist operator's retrograde CTO recanalization results improve significantly when

using the CM. Given the effectiveness and safety of CM-assisted retro- grade CTO recanalization, operators should be less aggressive with anterograde recanalization attempts, and should switch to the retrograde approach earlier and more often. **Address:** Department of Cardiology, Christian Medical College, Ida Scudder Road, Vellore632004, India

Nat PMID:22929822 BS

Kanthakumar, P. and Oommen, V.

A simple model to demonstrate perfusion and diffusion limitation of gasesAmerican Journal of Physiology - Advances in Physiology Education; 2012, 36 (4): 352-355

Address: Department of Physiology, Christian Medical College, Vellore, Tamil Nadu, India

Intl PMID:23209018 BS

Kanthakumar, P. and Oommen, V.

A simple model to demonstrate the balance of forces at functional residual capacityAmerican Journal of Physiology - Advances in Physiology Education; 2012, 36 (2): 170-171

Address: Department of Physiology, Christian Medical College, Vellore, Tamil Nadu, India

Intl PMID:22665434 BS

Kazi, A. I. and Oommen, A.

Monocrotophos induced oxidative damage associates with severe acetylcholinesterase inhibition in rat brainNeurotoxicology. 2012 Mar;33(2):156-61. doi: 10.1016/j.neuro.2012.01.008. Epub 2012Jan 23.

Background: Neurotoxicity of organophosphate pesticide poisoning, a lead cause of death in South Asia, has not been clearly elucidated. Organophosphates inhibit acetylcholinesterase and neurotoxicity is primarily a result of acetylcholine induced hyperactivation in different regions of the brain. Neurotoxicity also results from oxidative stress induced by acetylcholinesterase inhibition in the brain. Determining the severity of acetylcholinesterase inhibition that induces oxidative damage may help in developing strategies that protect the brain from organophosphate induced toxicity. Aim: To determine the level of acetylcholinesterase inhibition that induces oxidative stress in the brain following organophosphate pesticide poisoning. Methods: Brains of rats subject to acutemonocrotophos poisoning (0.8 LD 50 by gavage) were assessed for acetylchol inesteraseactivity, antioxidant response and oxidative damage 2.5 and 8h after poisoning and on recovery from poisoning 24h later after poisoning. Assessments were made in the cortex, striatum and hippocampus, cholinergic rich regions and cerebellum, targets of organophosphate pesticide poisoning. Analysis was in comparison to non poisoned controls. Results: High acetylcholinesterase activities were noted in striatum followed by hippocampus, cerebellum and cortex. Acute severe monocrotophos poisoning inhibited acetylcholinesterase 87% in striatum, 67% in hippocampus, 58% in cerebellum, 53% in cortex and increased glutathione levels significantly in all brain regions 2.5. h after poisoning. Significant lipid peroxidation and antioxidant enzymes were induced 8. h after poisoning, directly correlated to high acetylcholinesterase inhibition (>67%). Recovery from monocrotophos poisoning was associated with absence of lipid peroxidation in the brain although acetylcholinesterase inhibition persisted. Conclusions: Neurotoxicity of monocrotophos poisoning is characterized by oxidative damage in regions of the brain that exhibit high acetylcholinesterase activity and severe acetylcholinesterase inhibition. Recovery from poisoning is associated with prolonged induction of antioxidants that protect against oxidative damage. .**Address:** Neurochemistry Laboratory, Department of Neurological Sciences, ChristianMedical College, Vellore, India

Intl PMID:22285544 BS

Kumar, A., Prabha, R., Paul, T., Margaret Shanthi, F. X., George, J., Peedicayil, J. andErnest, K.

Tramadol inhibits the contractility of isolated caprine detrusor muscleAutonomic and Autacoid Pharmacology; 2012, 32 (1 PART 2): 15-221

The atypical opioid analgesic tramadol has been shown to provide beneficial clinical and urodynamic effects in patients with detrusor overactivity. The effect of tramadol on isolateddetrusor muscle has not been studied. This study investigated the ability of tramadol toinhibit acetylcholine (ACh)-induced contractility of the isolated caprine (goat) detrusor muscle. The effect

of three concentrations (30, 100 and 300 µm) of tramadol on 10 caprine detrusor strips contracted by the addition of 100, 200 or 400 µm ACh was studied. The sensitivity of tramadol-induced inhibition of ACh responses to treatment with the â- adrenoceptor antagonist propranolol (1 µm) and the opioid receptor antagonist naloxone (100 µµ) was also studied. 2 Tramadol caused a concentration-dependent inhibition of ACh- induced detrusor contraction that was reversed by raising the concentration of ACh. Propranolol, but not naloxone, reversed the tramadol-induced inhibition of contractions to ACh in the detrusor. 3 These results suggest that tramadol inhibits ACh-inducedcontractility of the isolated detrusor. They also suggest that tramadol does so by an indirect anticholinergic mechanism involving the stimulation of â-adrenoceptors. Tramadol may be useful in managing clinical conditions requiring relaxation of the detrusor muscle. Although the concentrations of tramadol needed to relax the detrusor were relatively high, these could be clinically attained via intravesical administration. © 2012 Blackwell Publishing Ltd. **Address:** Department of Pharmacology and Clinical Pharmacology, Christian Medical College, Vellore 632 002, IndiaDepartment of Physical Medicine and Rehabilitation, Christian Medical College, India

Intl PMID:22372564 BS

Kürtül, I., Hammer, N., Rabi, S., Saito, T., Böhme, J. and Steinke, H.

Oblique sectional planes of block plastinates eased by Sac PlastinationAnnals of Anatomy; 2012, 194 (4): 404-406

To find an oblique cutting plane of a plastinate, e.g. to cut gamma-nails in the femur, the Block Plastination technique was modified. After CT and MRI examination, the specimens were plastinated with the standard resin mixture E6/E12/E600. Instead of using a box to form a block during the casting and curing stage, we embedded the specimen in a sac made of polyester foil. A polymerized wooden block was attached to the specimen. The sacwas wrapped with tape to the embedded specimen with the block. This approach limited the amount of required resin to the inner volume of the plastinate. Then, the plastination sac was put in the incubator for further polymerization and curing. When the foil was removed from the plastinated specimen, the wooden block served as a socket for the grip when sawing. The outer shape of the specimen remained visible. Doing so, the adequate cutting plane could be determined easily. © 2011 .**Address:** Department of Anatomy, Faculty of Veterinary Medicine, Mustafa KemalUniversity, Tayfur Sökmen Campus, 31040 Antakya, TurkeyInstitute of Anatomy, University of Leipzig, Liebigstraße 13, D-04103 Leipzig, Germany Department of Anatomy, Christian Medical College, Tamil Nadu, Vellore 632002, India Aichi Medical University, Yazako, Nagakute, Aichi 4801195, JapanDepartment of Trauma and Reconstructive Surgery, University of Leipzig, Liebigstraße 20a, D-04103 Leipzig, Germany

Intl PMID:22209028 BS

Lazarus, R. P., Kalaiselvan, S., John, K. R. and Michael, J. S.

Evaluation of the microscopic observational drug susceptibility assay for rapid and efficient diagnosis of multi-drug resistant tuberculosisIndian Journal of Medical Microbiology; 2012, 30 (1): 64-68

Purpose: Tuberculosis (TB) is endemic in India and the burden of multi-drug-resistant tuberculosis (MDR-TB) is high. Early detection of MDR-TB is of primary importance incontrolling the spread of TB. The microscopic observational drug susceptibility (MODS)assay has been described as a cost-effective and rapid method by which mycobacterial culture and the drug susceptibility test (DST) can be done at the same time. Materials and Methods: A total of 302 consecutive sputum samples that were received in an accredited mycobacteriology laboratory for conventional culture and DST were evaluated by the MODS assay. Results: In comparison with conventional culture on Lowenstein Jensen (LJ) media, the MODS assay showed a sensitivity of 94.12% and a specificity of 89.39% and its concordance with the DST by the proportion method on LJ media to isoniazid and rifampicin was 90.8% and 91.5%, respectively. The turnaround time for results by MODS was 9 days compared to 21 days by culture on LJ media and an additional 42 days for DST by the 1% proportion method. The cost of performing a single MODS assay was Rs. 250/-, comparedto Rs. 950/- for culture and 1st line DST on LJ. Conclusion: MODS was found to be a sensitive and rapid alternative method for

performing culture and DST to identify MDR-TB in resource poor settings.**Address:** Department of Microbiology, Christian Medical College, Vellore, Tamil Nadu632004, IndiaDepartment of Community Medicine, Christian Medical College, Vellore, Tamil Nadu 632004, India

Nat PMID:22361763 BS

Lundin, B., Manco-Johnson, M. L., Ignas, D. M., Moineddin, R., Blanchette, V. S., Dunn, A. L., Gibikote, S. V., Keshava, S. N., Ljung, R., Manco-Johnson, M. J., Miller, S. F., Rivard, G. E. and Doria, A. S.

An MRI scale for assessment of haemophilic arthropathy from the International ProphylaxisStudy GroupHaemophilia; 2012, 18 (6): 962-970

Evaluation of prophylactic treatment of haemophilia requires sensitive methods. To design and test a new magnetic resonance imaging (MRI) scale for haemophilic arthropathy, two scales of a combined MRI scoring scheme were merged into a single scale which includes soft tissue and osteochondral subscores. Sixty-one joint MRI's of 46 patients with haemophilia were evaluated by four radiologists using the new and older scales. Forty-six of the joints were evaluated using two X-ray scales. For all MRI scores, interreader agreement and correlations with X-ray scores and lifetime number of haemarthroses were analysed. The interreader agreement intraclass correlation coefficient was 0.82, 0.89 and 0.88 for the soft tissue and osteochondral subscores and the total score, as evaluated according to the new MRI scale, compared to 0.80 and 0.89 as for the older scales. The total score and osteochondral subscore according to the new scale, as well as scores according to the older scales were correlated ($P < 0.01$) with number of haemarthroses (Spearman correlation0.35-0.68) and with the X-ray scores (Spearman correlation 0.40-0.76), but no correlation ($P > 0.05$) was found between the soft tissue subscore of the new MRI scale and the X-ray scores. The new MRI scale is simpler to apply than the older and has similar reader reliability and correlation with lifetime number of haemarthroses, and by separating softtissue and osteochondral changes it gives additional information. The new scale is useful for analyses of early and moderate stages of arthropathy, and may help to evaluateprophylactic haemophilia treatment. © 2012 Blackwell Publishing Ltd.**Address:** Department of Clinical Sciences Lund, Division of Diagnostic Radiology and Center for Medical Imaging and Physiology, Lund University, Skåne University Hospital, Lund, SwedenDepartment of Radiology and Hemophilia and Thrombosis Center, University of Colorado, Denver, CO, United StatesChild Health Evaluative Sciences, The Hospital for Sick Children, Toronto, ON, CanadaUniversity of Toronto, Public Health, Family and Community Medicine, Toronto, ON, CanadaDivision of Pediatric Hematology/Oncology, The Hospital for Sick Children and Department of Pediatrics, University of Toronto, Toronto, ON, CanadaAflac Cancer Center and Blood Disorders Service, Children's Healthcare of Atlanta, EmoryUniversity School of Medicine, Atlanta, GA, United StatesDepartment of Radiology, Christian Medical College, Vellore, Tamil Nadu, India Department of Paediatrics, Lund University, Skåne University Hospital, Malmö-Lund, SwedenDepartment of Pediatrics and the Hemophilia and Thrombosis Center, University of Colorado, Denver, CO, United StatesSt. Jude Children's Research Hospital, Memphis, TN, United StatesCHU Sainte Justine, University of Montreal, Montreal, QC, CanadaDepartment of Diagnostic Imaging, The Hospital for Sick Children, Toronto, ON, Canada

PMID: 22765835 BS

Manoharan, A., Sugumar, M., Kumar, A., Jose, H. and Mathai, D.

Phenotypic & molecular characterization of AmpC â-lactamases among Escherichia coli, Klebsiella spp. & Enterobacter spp. from five Indian Medical Centers Indian Journal of Medical Research; 2012, 135 (3): 359-364

Background & objectives: AmpC â-lactamases which are often plasmid mediated hydrolyze all â-lactam antibiotics except cefepime and carbapenems. We evaluated the presence of AmpC â-lactamases among Enterobacteriaceae strains recovered prospectively from patients at five Indian tertiary care centres. Methods: The study included 909 consecutive Gram-negative isolates recovered from clinically significant specimens during June 2007 - May 2008 as part of an ICMR-ESBL study. Among the study isolates, 312 were found to be cefoxitin resistant by disc diffusion test (DDT). Minimum inhibitory concentration (MIC)

determination by E test was done against amikacin, levofloxacin, impinem, meropenem, ertapenem, tigecycline and piperacillin-tazobactam. Combined DDT using phenyl boronic acid as inhibitor with cefoxitin was used for phenotypic confirmation of AmpC phenotype. The common Amp C genotypes ACC, FOX, MOX, DHA, CIT and EBC were detected by multiplex PCR. Results: Plasmid mediated Amp C phenotype was confirmed in 114 of the312 (36.5%) cefoxitin resistant isolates with 255 (81.7%) showing multidrug resistance. Susceptibility to tigecycline was highest (99%) followed by imipenem, meropenem (97%),ertapenem (89%), amikacin (85%), and piperacillin-tazobactam (74.6%). Levofloxacinresistance was 82 per cent. ESBL co carriage was observed among 92 per cent of Amp C producers. Among 114 Amp C producers, 48 could be assigned a genotype, this included CIT- FOX (n=25), EBC (n=10), FOX (n = 4), CIT (n=3), EBC-ACC (n=2) and one each of DHA, EBC-DHA, FOX -DHA and FOX-EBC-DHA. Interpretation & conclusions: Overall, AmpCphenotypes were found in 12.5 per cent isolates, multidrug resistance and ESBL co-carriage among them was high suggesting plasmid mediated spread. The study results haveimplications in rational antimicrobial therapy and continued surveillance of mechanisms ofresistance among nosocomial pathogens.**Address:** Laboratories for Infection, Immunity and Inflammation (BMPLIII), Medicine Unit Iand Infectious Diseases, Christian Medical College, Vellore, IndiaDepartment of Microbiology, Amrita Institute of Medical Sciences, Kochi, India

Nat PMID:22561623 BS

Narayanan, K., Oommen, R., Thomson, V. S. and Jose, J. V.

Assessment of left ventricular systolic function by velocity vector imagingIndian Heart Journal; 2012, 64 (2): 146-149

Objectives: To study the usefulness of a novel echocardiographic technique, velocity vector imaging (VVI) in the measurement of left ventricular ejection fraction (LVEF). Background:Ejection fraction measured by echocardiography forms the cornerstone in the assessment ofLV systolic function. Errors in measurement of EF by routine two-dimensional echocardiography (2D ECHO) limit its utility. The VVI is a new technology which uses speckle tracking and other algorithms to track the endocardial border. This may help in more accurate assessment of EF. Methods: Global and regional LVEF was measured in 49 patients using VVI, 2D ECHO and radionuclide-gated single photon emission computed tomography (SPECT). Results were categorised as normal, mild, moderate, or severe LV systolic dysfunction based on American Society of ECHO classification. The results were analysed by appropriate statistical tests for correlations. Results: The mean EF was 35 ±12.08% by VVI, 54.2 ± 19.51% by SPECT ($P < 0.001$ vs VVI) and 50.3 ± 8.92% by 2D ECHO ($P < 0.001$ vs VVI). There was weak linear positive correlation between EF measuredby VVI and the other modalities (Pearson's correlation coefficient 0.577 for SPECT and0.573 for 2D; $P = 0.01$). The VVI systematically underestimated the EF compared to SPECT. Greater number of patients had moderate or severe LV systolic dysfunction by VVI (37;74.5%) than by SPECT (17; 34.7%; $P = 0.037$). We derived a correction factor to calculateSPECT EF from VVI EF as follows: EF (SPECT) = EF (VVI) × 0.9 + 21 or approximately VVI (EF) + 20. Conclusion: Measurement of EF by VVI is feasible. The VVI underestimated the EF when compared to nuclear-gated SPECT in this study. The accuracy of this technology and the need for a correction factor needs to be assessed in future studies. **Address:** Department of Cardiology, Christian Medical College, Vellore-632004, Tamilnadu, IndiaDepartment of Nuclear Medicine, Christian Medical College, Vellore-632004, Tamilnadu,India

Nat PMID: 22572489 BS

Pai, R., Nehru, G., Samuel, P., Selvan, B., Kumar, R., Jacob, P. and Nair, A.

Discriminating thyroid cancers from benign lesions based on differential expression of a limited set of miRNA using paraffin embedded tissuesIndian Journal of Pathology and Microbiology; 2012, 55 (2): 158-162

Background : Micro-RNAs (miRNAs) are expressed in a tissue-specific manner and are known to demonstrate differential expression even among the various subtypes of a giventumor. This differential expression has been harnessed successfully in the development ofdiagnostic assays for various malignant tumors. These assays have been found to

be relevant and of value as additional diagnostic tools even among thyroid tumors, particularly with regard to thyroid carcinomas of follicular morphology. Materials and Methods : A limited set of miRNA have been assessed as part of this study in an effort to use minimal number of miRNA markers (miR-187, miR-221, miR-222, and miR-224) to differentiate the benign from the malignant thyroid tumors using miRNA derived from paraffin embedded material. Results : While miR-221 and miR-222 were found to provide good accuracy as individual markers (86% and 84%), a combination of the two provided slightly better accuracy (91%). Both miR-221 and 222 were able to significantly differentiate malignant tumors from the benign samples (P< 0.001) individually and as a combination of markers. However, inclusion of miR-187 and miR-224 in the panel did not provide any additional benefit. Conclusion : While a combination of miR-221 and 222 when used in a diagnostic panel could provide fairly good accuracy additional markers may need to be investigated to augment their diagnostic utility.**Address:** Molecular Pathology Laboratory, Department of Pathology, Christian MedicalCollege, Vellore- 632 004, IndiaDepartments of Biostatistics, Unit VI, Christian Medical College, Vellore, Tamil Nadu, IndiaDepartments of Surgery, Unit VI, Christian Medical College, Vellore, Tamil Nadu, India

Nat PMID: 22771635 BS

Patel, N., Masaratana, P., Diaz-Castro, J., Latunde-Dada, G. O., Qureshi, A., Lockyer, P., Jacob, M., Arno, M., Matak, P., Mitry, R. R., Hughes, R. D., Dhawan, A., Patterson, C.,Simpson, R. J. and Mckiea, A. T.

BMPER protein is a negative regulator of hepcidin and is up-regulated in hypotransferrinemic miceJournal of Biological Chemistry; 2012, 287 (6): 4099-4106

The BMP/SMAD4 pathway has major effects on liver hepcidin levels. Bone morphogenetic protein-binding endothelial cell precursor-derived regulator (Bmper), a known regulator of BMPsignaling, was found to be overexpressed at themRNAand protein levels in liver of genetically hypotransferrinemic mice (Trf hpx/hpx). Soluble BMPER peptide inhibited BMP2- and BMP6-dependent hepcidin promoter activity in both HepG2 and HuH7 cells. These effects correlated with reduced cellular levels of pSMAD1/5/8. Addition of BMPER peptide to primary human hepatocytes abolished the BMP2-dependent increase in hepcidin mRNA, whereas injection of Bmper peptide into mice resulted in reduced liver hepcidin and increased serum iron levels. Thus Bmper may play an important role in suppressing hepcidin production in hypotransferrinemic mice. © 2012 by The American Society for Biochemistry and Molecular Biology, Inc.**Address:** Diabetes and Nutritional Sciences Division, School of Medicine, Kings CollegeLondon, London WC2R 2LS, United KingdomDepartment of Biochemistry, Faculty of Medicine, Siriraj Hospital, Bangkok 10700, ThailandDepartment of Physiology, University of Granada, Granada 10871, SpainDivision of Cardiology, University of North Carolina, Chapel Hill, NC 27599, United States Department of Biochemistry, Christian Medical College, Vellore, Tamil Nadu 632002, India Genomics Centre, Biomedical Sciences, Kings College London, London WC2R 2LS, United KingdomInstitut Cochin, UniversitéParis Descartes, Paris 75014, FranceHepatocyte Biology and Transplantation Group, King's College Hospital, London SE5 9RS, United Kingdom

Intl PMID:22144676 BS

Pattnaik, S., John, K. R., Shalini, E. and Michael, J. S.

Agreement between skin testing and QuantiFERON®-TB gold In-Tube assay (QFT-TB) in detecting latent tuberculosis infection among household contacts in IndiaIndian Journal of Tuberculosis; 2012, 59 (4): 214-218

Aims: The present study was designed to find the agreement between Tuberculin Skin Test and interferon gamma assay test in detecting latent tuberculosis infection in household contacts of sputum culture positive tuberculosis cases. Setting: Department of Community Medicine, Christian Medical College, Vellore. Methods: One hundred and fifty household contacts of sputum culture positive tuberculosis cases were tested with both the methods simultaneously and actual as well as kappa agreement was determined. Results: The overall actual agreement between both the tests was found to be 82% with a kappa agreement of 0.57. Conclusion: The agreement was very high (both percentage agreement and Kappa) in pediatric contacts but it was poor in adult contacts. **Address:** Department of Community Medicine, Kalinga Institute of Medical Sciences(KIMS), Bhubaneswar, IndiaDepartment of Community Medicine, SRM Medical College,

Kancheepuram, IndiaDepartment of Microbiology, Christian Medical College, Vellore, India

Nat PMID:23342541 BS

Paul, H., Peter, D., Pulimood, S. A., Abraham, O. C., Mathai, E., Prasad, J. H. andKannangai, R.

Role of polymerase chain reaction in the diagnosis of Trichomonas vaginalis infection in human immunodeficiency virus-infected individuals from India (South)Indian Journal of Dermatology, Venereology and Leprology; 2012, 78 (3): 323-327

Background: Trichomonas vaginalis is a protozoan parasite and an etiological agent for trichomoniasis, a sexually transmitted infection (STI). Fifty to eighty percentage of women with trichomoniasis are asymptomatic and in the absence of treatment the infection persists longer. Aim: To evaluate the role of polymerase chain reaction (PCR) in the diagnosis of trichomoniasis and also to look at the frequency of infection among human immunodeficiency virus (HIV) infected women. Methods: A non-nested PCR was standardized to detect 102 bp size amplified product of the adhesin gene of T. vaginalis.The real time performance of this assay was performed with vaginal swab samples from198 HIV-seropositive women who attended the infectious disease clinic and compared with wet mount and culture in Diamond's modified media. Results: Among the prospectivelystudied 198 HIV-infected women, 1 (0.51%) was positive by wet mount, 6 (3.03%) werepositive by culture and 10 (5.02%) were positive by the PCR. There was a significant observed agreement between the PCR and culture (k=0.74, Z=10.7, P<0.0000). Conclusion: Our study showed that the PCR assay for the amplification of adhesion gene is a highly sensitive method to screen the high risk group individuals like HIV-positive womenfor Trichomonas vaginalis compared to the culture. Testing algorithm should be, wet mount and if negative, test by PCR as it is rapid compared to culture which takes 7 days.**Address:** Department of Clinical Microbiology, Christian Medical College, Vellore, TamilNadu, IndiaDepartment of Dermatology, Christian Medical College, Vellore, Tamil Nadu, IndiaDepartment of Internal Medicine, Christian Medical College, Vellore, Tamil Nadu, India Department of Community Medicine, Christian Medical College, Vellore, Tamil Nadu, India Department of Clinical Virology, Christian Medical College, Vellore - 632 004, Tamil Nadu, India

Nat PMID:22565432 BS

Prakash, J. A. J., Sohan Lal, T., Rosemol, V., Verghese, V. P., Pulimood, S. A., Reller, M. and Dumler, J. S.Molecular detection and analysis of spotted fever group Rickettsia in patients with fever and rash at a tertiary care centre in Tamil Nadu, IndiaPathogens and Global Health; 2012, 106 (1): 40-45

Background: Detection of specific targets by PCR is used to confirm a diagnosis of spotted fever, but serological tests are still widely used. In this prospective study, nested PCR wasperformed on skin biopsy specimens to confirm the diagnosis of spotted fever. Methods: In58 clinically suspected cases of spotted fever, nested PCR, to detect gltA, 17 kDa lipoprotein antigen gene (17 kDa), ompA and ompB, from skin biopsy of the rash was performed. Sequencing was carried on amplicons representing the four targets to confirm specificity of amplification. This was followed by phylogenetic analysis using MEGA version 4.0 software. Results: The gltA, 17 kDa, ompA, and ompB genes were detected from skin biopsy specimens in 38, 23, 27, and 22 individuals. Sequence analysis revealed that the gltA, 17 kDa, ompA, and ompB sequences belonged to spotted fever group (SFG) rickettsia. Of the six partial ompA gene sequences, only one was dissimilar to the previously reported'Candidatus Rickettsia kellyi'. Conclusion: Further evidence indicates that SFG rickettsiae resembling 'Candidatus Rickettsia kellyi' cause fever and rash in southern India. Moredetailed phylogenetic analysis following isolation of rickettsia in culture is required forproviding irrefutable proof for the occurrence of novel spotted fever rickettsiae in this region. © W. S. Maney & Son Ltd 2012.**Address:** Department of Microbiology, Christian Medical College, Ida Scudder Road, Vellore, Tamil Nadu 632004, IndiaDepartment of Pathology, Johns Hopkins University School of Medicine, Baltimore, MD,United States

Intl PMID: 22595273 BS

Prithishkumar, I. J.

Ludwig Edinger (1855-1918): founder of modern neuroanatomyClinical anatomy (New York, N.Y.); 2012, 25 (2): 155-157

Ludwig Edinger, a German neurologist is considered as one of the founders of modern neuroanatomy. He was conferred the degree of Doctor of Medicine at the University of Strassburg. His observation of small living organisms under a microscope at an early age led him to study medicine. Edinger had many discoveries to his credit. He was the first to describe the ventral and dorsal spinocerebellar tracts, to distinguish between paleo-encephalon and neo-encephalon, and between paleo-cerebellum and neo-cerebellum. He coined the terms "gnosis" and "praxis," which were later adopted in psychologicaldescriptions of agnosia and apraxia. He identified the Edinger-Westphal nucleus in 1885 andwas the first to describe the syndrome of thalamic pain. Edinger worked with renowned clinicians and published a large number of papers. He founded the Neurological Institute at the Goethe University in Frankfurt, which is the oldest neurological Institute in Germany. Edinger was a rare combination of a profound scientist, a brilliant teacher, a fine artist, and a noted hypnotist. While at the height of his career, he underwent a surgery and died a few hours later. It was his last will that his brain should be dissected in his own institute. It showed extraordinarily well-developed occipital lobes as well as other unusual features. Copyright © 2011 Wiley-Liss, Inc.**Address:** Department of Anatomy, Christian Medical College, Vellore, India.

Intl PMID:21800368 BS

Purohit, M., Mendiratta, D. K., Deotale, V. S., Madhan, M., Manoharan, A. and Narang, P.

Detection of metallo-â-lactamases producing Acinetobacter baumannii using microbiologicalassay, disc synergy test and PCRIndian Journal of Medical Microbiology; 2012, 30 (4): 456-461

Background: One leading factor responsible for resistance in Acinetobacter baumannii, an important opportunist in health care institutions globally, is the production of carbapenamases like metallo-â-lactamases (MBLs), which hydrolyze a variety of â-lactamsincluding penicillin, cephalosporins and carbapenems. However, neither any standardguidelines are available nor any method has been found to be perfect for their detection. Various methods have shown discordant results, depending upon the employed methodology, â-lactamase substrate and MBL inhibitor used. This study aims to evaluate two phenotypic methods against PCR as gold standard among carbapenem resistant A. baumannii for identifying MBL producers. Materials and Methods: A total of 130 A. baumannii were screened for imipenem and meropenem resistance by Kirby-Bauer disc diffusion method. Phenotypic expression of MBL was detected by EDTA-imipenem- microbiological (EIM) assay and extended EDTA disc synergy (eEDS) test and presence of bla-IMP and bla-VIM was detected by PCR in all the carbapenem resistant isolates. Results: Of the 43 imipenem and/or meropenem resistant A. baumannii isolates, 4 (9.3%) were found to be MBL producers by EIM and 3 (6.97%) by eEDS. Only bla-VIM gene was detected in 7 (16.28%) by PCR. In addition EIM detected 14 (32.56%) carbapenem resistant non-metallo enzyme producers. Conclusion: Of the two MBL genes targeted, bla- VIM was only detected and that too in isolates resistant to both imipenem and meropenem. Further, EIM was useful in differentiating MBL from non-metalloenzymes producers. **Address:** Department of Microbiology, Mahatma Gandhi Institute of Medical Sciences, Sevagram, Wardha, IndiaDepartment of Medicine Unit i and Infectious Diseases, Prof Benjamin M PulimoodLaboratories for Infection and Immunity, Christian Medical College, Vellore - 632 004, Tamilnadu, India

Nat PMID:23183473 BS

Rajagopal, K., Dutt, V., Manickam, A. S. and Madhuri, V.

Chondrocyte source for cartilage regeneration in an immature animal: Is iliac apophysis a good alternativeIndian Journal of Orthopaedics; 2012, 46 (4): 402-406

Background: Autologous articular cartilage at present forms the main source of chondrocytes for cartilage tissue engineering. In children, iliac apophysis is a rich and readily accessible source of chondrocytes. This study compares the growth characteristicsand phenotype maintenance of goat iliac apophysis growth plate chondrocytes with thosesourced from goat articular cartilage, and thereby assesses their suitability for autologous chondrocyte transplantation

in immature animals for growth plate and articular cartilage regeneration. Materials and Methods: Four sets of experiments were carried out. Cartilage samples were harvested under aseptic conditions from goat iliac apophysis and kneearticular cartilage. The chondrocytes were isolated in each set and viable cells were countedand subsequently cultured as a monolayer in tissue culture flasks containing chondrogenic media at 2.5 × 10 3 cells/cm 2. The growth was periodically assessed with phase contrast microcopy and the cells were harvested on 8 th and 15 th days for morphology, cell yield, and phenotype assessment. Student's t-test was used for comparison of the means. Results: Confluence was reached in the iliac apophysis growth plate chondrocytes flasks on the 10 th day and the articular cartilage chondrocytes flasks on the 14 th day. Mean cell count of growth plate chondrocytes on the 8 th day was 3.64 × 10 5 (SD = 0.601) and that of articular cartilage chondrocytes was 1.40 × 10 5 (SD = 0.758) per flask. The differencein the means was statistically significant (P = 0.003). On the 15 th day, the mean cell number had increased to 1.35 × 10 6 (SD = 0.20) and 1.19 × 10 6 (SD = 0.064) per flask,respectively. This difference was not statistically significant (P = 0.26). The populationdoubling time on the 8 th day of cell culture was 3.18 and 6.24 days respectively, for iliac apophyseal and articular cartilage chondrocytes, which was altered to 3.59 and 3.1 days, respectively, on the 15 th day. The immunocytochemistry showed 100% retention of collagen 2 positive and collagen 1 negative cells in both sets of cultures in all samples. Conclusion: Iliac apophysis is a rich source of chondrocytes with a high growth rate and ability to retain phenotype when compared to articular cartilage derived chondrocytes. Further in vivo studies may determine the efficacy of physeal and articular repair in children with apophyseal chondrocytes.**Address:** Paediatric Orthopaedics Unit, Department of Orthopaedics, Christian MedicalCollege Hospital, Ida Scudder Road, Vellore - 632004, Tamil Nadu, IndiaDepartment of Physiology, Christian Medical College, Vellore, Tamil Nadu, India

Nat PMID:22912514 BS

Rajkumar, A. P., Poonkuzhali, B., Kuruvilla, A., Srivastava, A., Jacob, M. and Jacob, K. S.

Association between CYP1A2 gene single nucleotide polymorphisms and clinical responsesto clozapine in patients with treatment-resistant schizophreniaActa Neuropsychiatrica; 2012, DOI: 10.1111/j.1601-5215.2012.00638.x

Objectives: Despite clozapine's superior clinical efficacy in treatment-resistant schizophrenia (TRS), its adverse effects, need for periodic leukocyte monitoring, cost and variable clinical outcomes mandate a clinical need to predict its treatment response. Although cytochrome P450 1A2 (CYP1A2) is the principal determinant of metabolism of clozapine, the role of CYP1A2 gene in the clinical response to clozapine is uncertain. Hence, we investigated its association with treatment responses and adverse events of clozapine in TRS. Methods: We evaluated four single nucleotide polymorphisms (SNP) in the CYP1A2 gene, clinicalresponses and serum clozapine levels in 101 consecutive patients with TRS on stable doses of clozapine. We defined clozapine response a priori and investigated allelic and genotypic associations. We assessed the socio-demographic and clinical profiles, premorbid adjustment, traumatic life events, cognition and disability of the participants, using standard assessment schedules for appropriate multivariate analyses. Results: Our results revealed that CYP1A2 gene SNP (*1C, *1D, *1E and *1F) were not associated with clozapine treatment response, adverse effects, serum clozapine levels or with disability (p values > 0.10). Conclusions: As CYP1A2 gene SNP do not help to predict the clinical response to clozapine, routine screening for them prior to start clozapine is currentlyunwarranted. We suggest future longitudinal genome-wide association studies investigating clinical and pharmacogenetic variables together. © 2012 John Wiley & Sons A/S.

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Intl BS

Reißmann, S., Gillen, C. M., Fulde, M., Bergmann, R., Nerlich, A., Rajkumari, R., Brahmadathan, K. N., Chhatwal, G. S. and Nitsche-Schmitz, D. P.

Region specific and worldwide distribution of collagen-binding M proteins with PARF motifs among human pathogenic streptococcal isolatesPLoS One. 2012;7(1):e30122. doi: 10.1371/journal.pone.0030122. Epub 2012 Jan 11.

Some of the variety of Streptococcus pyogenes and Streptococcus dysgalactiae ssp.equisimilis (SDSE) M proteins act as collagen-binding adhesins that facilitate acute infection. Moreover, their potential to trigger collagen autoimmunity has been implicated inthe pathogenesis of acute rheumatic fever and attributed to a collagen-binding motif calledPARF (peptide associated with rheumatic fever). For the first time we determine the rate of clinical isolates with collagen-binding M proteins that use a PARF motif (A/T/E)XYLXX(L/F)N in a defined geographic region, Vellore in South India. In this region both, incidence ofstreptococcal infections and prevalence of acute rheumatic fever are high. M proteins withPARF motif conferred collagen-binding activity to 3.9% of 153 S. pyogenes and 10.6% of255 SDSE clinical isolates from Vellore. The PARF motif occurred in three S. pyogenes and22 SDSE M protein types. In one of the S. pyogenes and five of the SDSE M proteins that contained the motif, collagen-binding was impaired, due to influences of other parts of the M protein molecule. The accumulated data on the collagen binding activity of certain M protein types allowed a reanalysis of published worldwide emm-typing data with the aim to estimate the rates of isolates that bind collagen via PARF. The results indicate that M proteins, which bind collagen via a PARF motif, are epidemiologically relevant in human infections, not only in Vellore. It is imperative to include the most relevant collagen-binding M types in vaccines. But when designing M protein based vaccines it should be considered that collagen binding motifs within the vaccine antigen remain potential risk factors. ©2012 Reißmann et al.

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Intl PMID:22253902 BS

Sabapathy, V., Ravi, S., Srivastava, V., Srivastava, A. and Kumar, S.

Long-term cultured human term placenta-derived mesenchymal stem cells of maternal origin displays plasticityStem Cells Int. 2012;2012:174328. doi: 10.1155/2012/174328. Epub 2012 Mar 26.

Mesenchymal stem cells (MSCs) are an alluring therapeutic resource because of their plasticity, immunoregulatory capacity and ease of availability. Human BM-derived MSCs have limited proliferative capability, consequently, it is challenging to use in tissue engineering and regenerative medicine applications. Hence, placental MSCs of maternal origin, which is one of richest sources of MSCs were chosen to establish long-term culture from the cotyledons of full-term human placenta. Flow analysis established bonafied MSCs phenotypic characteristics, staining positively for CD29, CD73, CD90, CD105 and negatively for CD14, CD34, CD45 markers. Pluripotency of the cultured MSCs was assessed by in vitro differentiation towards not only intralineage cells like adipocytes, osteocytes, chondrocytes, and myotubules cells but also translineage differentiated towards pancreatic progenitorcells, neural cells, and retinal cells displaying plasticity. These cells did not significantly alter cell cycle or apoptosis pattern while maintaining the normal karyotype; they also have limited expression of MHC-II antigens and are Naive for stimulatory factors CD80 and CD86. Further soft agar assays revealed that placental MSCs do not have the ability to form invasive colonies. Taking together all these characteristics into consideration, it indicatesthat placental MSCs could serve as good candidates for development and progress of stem-cell based therapeutics. Copyright © 2012 Vikram Sabapathy et al.

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Intl PMID:22550499 BS

Samuel, S., Mathew, B. S., Veeraraghavan, B., Fleming, D. H., Chittaranjan, S. B. andPrakash, J. A. J.

In vitro study of elution kinetics and bio-activity of meropenem-loaded acrylic bone cementJournal of Orthopaedics and Traumatology; 2012, 13 (3): 131-136

Background Use of antibiotic-loaded acrylic bone cement to treat orthopaedic infections continues to remain popular, but resistance to routinely used antibiotics has led to the search for alternative, more effective antibiotics. We studied, in vitro, the elution kinetics and bio-activity of different concentrations of meropenem-loaded acrylic bone cement. Methods Meropenem-loaded bone cement cylinders of different concentrations were serially immersed in normal saline. Elution kinetics was studied by measuring the drug concentration in the eluate, collected at pre-determined intervals, by high-performance liquid chromatography. Bio-activity of the eluate of two different antibiotic concentrations was tested for a period of 3 weeks against each of the following organisms: Staphylococcus aureus ATCC 2593 (MSSA), Enterococcus faecalis ATCC 29212, Pseudomonas aeruginosa ATCC 27853, Escherichia coli ATCC 25922, S. aureus ATCC 43300 (MRSA) and Klebsiella pneumoniae ATCC 700603 (ESBL). Results Meropenem elutes from acrylic bone cement for a period of 3-27 days depending on the concentration of antibiotic. Higher doses of antibiotic concentration resulted in greater elution of the antibiotic. The eluate was found to be biologically active against S. aureus ATCC 2593 (MSSA), P. aeruginosa ATCC 27853, E. coli ATCC 25922 and K. pneumoniae ATCC 700603 (ESBL) for a period of 3 weeks. Conclusions The elution of meropenem is in keeping with typical antibiotic-loaded acrylic bone cement elution characteristics. The use of high-dose meropenem-loaded acrylic bone cement seems to be an attractive option for treatment of resistant Gram-negative orthopaedic infections but needs to be tested in vivo. © The Author(s) 2011.

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Intl PMID:22461001 BS

Sandhu, G. K., Dunscombe, P., Meyer, T., Pavamani, S. and Khan, R.

Inter- and intra-observer variability in prostate definition with tissue harmonic and brightness mode imagingInternational Journal of Radiation Oncology Biology Physics; 2012, 82 (1): e9-e16

Purpose: The objective of this study was to compare the relative utility of tissue harmonic (H) and brightness (B) transrectal ultrasound (TRUS) images of the prostate by studying interobserver and intraobserver variation in prostate delineation. Methods and Materials: Ten patients with early-stage disease were randomly selected. TRUS images of prostates were acquired using B and H modes. The prostates on all images were contoured by an experienced radiation oncologist (RO) and five equally trained observers. The observers were blinded to information regarding patient and imaging mode. The volumes of prostate glands and areas of midgland slices were calculated. Volumes contoured were compared among the observers and between observer group and RO. Contours on one patient were repeated five times by four observers to evaluate the intraobserver variability. Results: A one-sample Student t-test showed the volumes outlined by five observers are in agreement ($p > 0.05$) with the RO. Paired Student t-test showed prostate volumes ($p = 0.008$) and midgland areas ($p = 0.006$) with H mode were significantly smaller than that with B mode. Two-factor analysis of variances showed significant interobserver variability ($p < 0.001$) in prostate volumes and areas. Inter- and intraobserver consistency was quantified as the standard deviation of mean volumes and areas, and concordance indices. It was found that for small glands (d”35 cc) H mode provided greater interobserver consistency; however, for large glands (e”35 cc), B mode provided more consistent estimates. Conclusions: H modeprovided superior inter- and intraobserver agreement in prostate volume definition for small to medium prostates. In large glands, H mode does not exhibit any additional advantage. Although harmonic imaging has not proven advantageous for all cases, its utilization seems to be judicious for small prostates. Copyright © 2012 Elsevier Inc. Printed in the USA. All rights reserved.

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Intl PMID: 21489703 BS

Sangeetha, G., John, J. and Ranjith, J.

Comparison of different phenotypic methods with pcr detection of Mec A gene for detection of methicillin-resistant Staphylococcus aureus (MRSA)International Journal of Pharmacy and Pharmaceutical Sciences; 2012, 4 (SUPPL. 4): 495-497

Emergence of Methicillin-resistant Staphylococcus aureus (MRSA) as leading cause of nasocomial infection is major concern in clinical practice. Molecular identification of Mec A gene is considered gold standard and preferred on other phenotypic identification of MRSA. Aim of our study to compare different phenotypic methods for MRSA with molecular identification of Mec A gene. 63 clinical MRSA strain were used in this study to evaluate different test like cefoxotin disc diffusion test, Oxoid PBP22 latex agglutination test kit, Slidex staph plus by Biomeurix, oxacillin agar screening test and compare it with molecular detection of Mec A gene by PCR. Cefotoxin disc diffusion test and PBP2' latex test assay have high sensitivity and specificity i.e 100 % compared to Gold standard PCR for MRSA identification.

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Intl BS

Selvan, B., Ramachandran, A., Korula, A., Amirtharaj, G. J., Kettimuthu, K., Nair, S., Nair, A., Samuel, P. and Mathew, G.

Low dose aspirin prevents duodenoesophageal reflux induced mucosal changes in wistar rat esophagus by MAP kinase mediated pathwaysInternational Journal of Surgery; 2012, 10 (2): 73-79

Background: Investigations of molecular mechanisms behind the progression of neoplastic changes in the esophagus have uncovered the role of the COX & 5-Lox pathways. Human squamous esophageal mucosa produces relatively large amounts of eicosanoids in the presence of inflammation. Laboratory and epidemiological data suggest that aspirin andnon-steroidal anti-inflammatory drugs may be chemo preventive through their inhibitoryeffect on COX25, 10. Cell culture studies have shown that the members of the mitogen activated protein (MAP) kinase family plays an important role in the development of bileacid-induced carcinogenesis. Differences in MAPK pathways activated by bile exposure were also noted in esophageal squamous cell lines and biopsies from patients with GERD. Theprotective role of aspirin and its molecular mechanism is not well understood. Aims: 1.The effect of duodenal reflux on esophageal mucosa.2.The role of aspirin in preventing duodenalreflux induced esophageal mucosa changes.3.If it is proven to be preventive, the mechanism of its action. A duodenal reflux rat animal model was used by an end- to-sideesophago duodenostomy. Methods: Total of 56 rats was included. 3 were “Naive control”animals which did not undergo the surgical procedure. The remaining animals were divided into two groups: Surgery alone (experimental) and Surgery + aspirin [therapy group], esophagoduodenostomy. At 40 weeks, the rats were euthanized and appropriate esophageal samples were analysed for histopathology and p38 & ERK MAP kinases, VEGF, protease activity and caspase 3 activities. Results: The presence of gross mucosal nodularity was seen in 21 and 10 rats of the experimental and therapy group respectively ($p = 0.03$; Table 1). Reflux-associated changes such as basal cell hyperplasia were more common in the experimental group, however this association did not reach statistical significance ($p = 0.15$; Table 1). Epithelial hyperplasia was seen more in the experimental group, which was prevented by aspirin [. $p < 0.01$]. Papillomatosis, as shown in Fig. 4 was more common in the experimental group ($p = 0.02$). Activation of p38 & ERK MAP kinases was prevented in aspirin group ($p < 0.05$, CI -1.796—0.014). Examination of protease activity by zymographic analysis of the esophageal samples revealed a number of gelatinolytic bands in 50% rats of the experimental group, not observed in the therapy group. No significant changes were seen in Caspase 3 [Normal areas -99.74 & nodular areas - 100.34 percent of controls] or VEGF [mean 0.64, sd ± 0.76 Vs 0.69 ± 0.96]activity.

Conclusions: Our data demonstrated that low dose aspirin reduced the incidence of duodenoesophageal reflux induced histological changes in the esophagus by preventing activation of proliferative & anti-apoptotic MAP kinases such as p38 & ER as well asprotease activity. Though Barretts' changes and adenocarcinoma have not developed, it could explain the role of duodenoesophageal reflux in the development of differenthistological but potential premalignant lesions and molecular level changes which areprevented by low dose aspirin. © 2011 Surgical Associates Ltd.

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Intl PMID:22197650 BS

Shah, N. H., Aniket Kumar, A., Kaysina Vazhudhi, N., Blessed Winston, A., Ernest, K. andMargaret Shanthi, F. X.

An animal study on the effect of different classes of organic calcium channel blockers in wound healingBiomedical Research (India); 2012, 23 (4): 521-525

An animal study of the effect of different classes of organic calcium channel blockers in wound healing. Calcium channel blockers (CCB) have been shown experimentally tomodulate cellular proliferation, maturation of keratinocytes and fibroblasts. We conductedthis study to determine the effect of calcium channel blockers on an excision wound model. A total of 24 Wis-tar male rats were divided into four groups each of which were treated with one of the following drugs: verapamil, diltiazem nimodipine or normal saline after excision wound. Primary outcome was percentage reduction of the wound at 7 th and 14 th post-operative days. Compared to normal saline, CCB caused a highly significant percentage reduction of wound area on days 7 and 14. CCB enhanced the wound healing process compared to normal saline. The median percentage reduction of wound surface area at 7 th day in the saline group with interquartile range was 22.56 (19.79-29.41) and that for the verapamil group 35.29 (31.84-54.58), diltiazem 52.45 (41.99-60.55) and nimodipine 47.19 (35.62-54.58) was statistically significant (p<.05) whereas on 14 th day for saline it was 39.82 (37.27-44.38) and that for verapamil was 96.73 (93.76-100), diltiazem 91.47 (87.44-94.85) and nimodipine 85.32 (76.81-91.64). Day 14 showed better results when compared to day 7 with a higher level of significance. Topical CCB may be capable of promoting wound-healing activity. Hence, topical CCB may be a suitable alternative to saline in the treatment of wound healing.

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Nat BS

Shetty, R., Sreekar, H., Lamba, S. and Gupta, A. K.

A novel and accurate technique of photographic wound measurementIndian Journal of Plastic Surgery; 2012, 45 (2): 425-429

Context: Wound measurement is an important aspect of wound management. Though there are many techniques to measure wounds, most of them are either cumbersome or tooexpensive. Aims: To introduce a simple and accurate technique by which wounds can beaccurately measured. Settings and Design: This is a comparative study of 10 patients whose wounds were measured by three techniques, i.e. ruler, graph and our technique. Materials and Methods: The graph method was taken as the control measurement. The extent of deviation in wound measurements with our method was compared with the standard technique. The statistical analysis used was ANOVA. Results: The ruler method was highly inaccurate and overestimated the wound size by nearly 50%. Our technique remained consistent and accurate with the percentage of over or underestimation being 2-4% in comparison with the graph method. Conclusions: This technique is simple and accurate and is an inexpensive and non-invasive method to accurately measure wounds.

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Nat PMID:23162244 BS

Sugimura, R., He, X. C., Venkatraman, A., Arai, F., Box, A., Semerad, C., Haug, J. S., Peng, L., Zhong, X. B., Suda, T. and Li, L.

Noncanonical Wnt signaling maintains hematopoietic stem cells in the nicheCell; 2012, 150 (2): 351-365

Wnt signaling is involved in self-renewal and maintenance of hematopoietic stem cells (HSCs); however, the particular role of noncanonical Wnt signaling in regulating HSCs in vivo is largely unknown. Here, we show Flamingo (Fmi) and Frizzled (Fz) 8, members of noncanonical Wnt signaling, both express in and functionally maintain quiescent long-term HSCs. Fmi regulates Fz8 distribution at the interface between HSCs and N-cadherin + osteoblasts (N-cad +OBs that enrich osteoprogenitors) in the niche. We further found that N-cad +OBs predominantly express noncanonical Wnt ligands and inhibitors of canonical Wnt signaling under homeostasis. Under stress, noncanonical Wnt signaling is attenuated and canonical Wnt signaling is enhanced in activation of HSCs. Mechanistically, noncanonical Wnt signaling mediated by Fz8 suppresses the Ca 2+-NFAT- IFNã pathway, directly or indirectly through the CDC42-CK1á complex and also antagonizes canonical Wnt signaling in HSCs. Taken together, our findings demonstrate that noncanonical Wntsignaling maintains quiescent long-term HSCs through Fmi and Fz8 interaction in the niche.© 2012 Elsevier Inc.

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Intl PMID:22817897 BS

Sukumaran, A., Venkatraman, A. and Jacob, M.

Inflammation-induced effects on iron-related proteins in splenic macrophages and the liver in mice Blood Cells, Molecules, and Diseases; 2012, 49 (1): 11-19

Anemia of inflammation is characterized by disturbances in systemic iron homeostasis. In order to better understand the events involved, we carried out a time-course study on the effects of acute and chronic inflammation on iron-related proteins in mouse splenic macrophages and the liver. Mice were sacrificed at various time points ranging from 0. h up to 4. weeks after induction of inflammation with turpentine oil. Expression levels of iron- related proteins in the splenic macrophages and liver were determined. Iron levels in the serum, spleen and liver were also measured. Hepatic hepcidin was found to be induced in response to inflammation. In the macrophages, expression levels of ferroportin and TfR1 were decreased at some of the time points. The expression of hepatic TfR1 and ferritin was significantly higher at the early time points. Ferritin levels in the liver decreased progressively thereafter; this was associated with significantly higher ferroportin expression in the liver, despite high levels of hepcidin, suggesting that hepcidin may not regulate ferroportin levels in the liver, unlike in the macrophages. The effects of hepcidin, thus, appeared to be tissue-specific. Serum iron levels were decreased initially; these then rose and were associated with decreasing iron levels in the liver and spleen. Thus, inflammation affected the expression levels of many proteins involved in iron homeostasis in splenic macrophages and the liver, with differences seen in the effects at these 2 sites. These effects are likely to contribute to the development of anemia of inflammation. © 2012Elsevier Inc.

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Intl PMID:22504041 BS

Vijayaraghavan, P., Chandy, S., Selvaraj, K., Pulimood, S. and Abraham, A. M.

Virological investigation of hand, foot, and mouth disease in a tertiary care center in SouthIndiaJournal of Global Infectious Diseases; 2012, 4 (3): 153-161

Context: Hand, foot, and mouth disease (HFMD) remains a common problem in India, yet its etiology is

largely unknown as diagnosis is based on clinical characteristics. There arevery few laboratory-based molecular studies on HFMD outbreaks. Aim: The aim of thisstudy was to characterize HFMD-related isolates by molecular techniques. Settings and Design: Between 2005 and 2008, during two documented HFMD outbreaks, 30 suspected HFMD cases presented at the Outpatient Unit of the Department of Dermatology, Christian Medical College (CMC), Vellore. Seventy-eight clinical specimens (swabs from throat, mouth, rectum, anus, buttocks, tongue, forearm, sole, and foot) were received from these patients at the Department of Clinical Virology, CMC, for routine diagnosis of hand, foot, and mouth disease. Materials and Methods: Samples from these patients were cultured in Vero and rhabdomyosarcoma (RD) cell lines. Isolates producing enterovirus-likecytopathogenic effect (CPE) in cell culture were identified by a nested reverse transcription- based polymerase chain reaction (RT-PCR) and sequenced. The nucleotide sequences were analyzed using the BioEdit sequence program. Homology searches were performed using the Basic Local Alignment Search Tool (BLAST) algorithm. Statistical Analysis used: Thestatistical analysis was performed using Epi Info version 6.04b and Microsoft Excel 2002(Microsoft Office XP). Results: Of the 30 suspected HFMD cases, only 17 (57%) were laboratory confirmed and Coxsackievirus A16 (CVA16) was identified as the etiological agent in all these cases. Conclusions: Coxsackievirus A16 (CVA16) was identified as the virus that caused the HFMD outbreaks in Vellore between 2005 and 2008. Early confirmation of HFMD helps to initiate control measures to interrupt virus transmission. Inthe laboratory, classical diagnostic methods, culture and serological tests are being replaced by molecular techniques. Routine surveillance systems will help understand theepidemiology of HFMD in India.

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Nat PMID: 23055646 BS

Athiyarath, R., Srivastava, A. and Edison, E. S.

Molecular basis of primary iron overload in India and the role of serum-derived factors in hepcidin regulation**Ann Hematol. 2012 Nov 15. [Epub ahead of print]**

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Intl PMID:23154866 BS

Balasubramanian, P., Panetta, J. C., Lakshmi, K. M., Mathews, V., George, B., Viswabandya, A., Chandy, M., Krishnamoorthy, R. and Srivastava, A.

Population pharmacokinetics of cyclophosphamide in patients with thalassemia major undergoing HSCTBone Marrow Transplantation; 2012, 47 (9): 1178-1185

CY in combination with BU is a widely used conditioning regimen for haematopoietic SCT (HSCT). The aim of this study was to evaluate the pharmacokinetics (PK) of CY and itsmajor metabolite 4-hydroxyCY (HCY) in patients with thalassemia undergoing HSCT. Atotal of 55 patients received BU (16 mg/kg) followed by CY (160-200 mg/kg) both over4 days before HSCT. A population PK model was developed to describe the disposition ofCY and HCY and the inter-individual (IIV) and inter-occasion variability (IOV). The model was also used to determine the effects covariates including: demographics, Lucarelli classification and polymorphisms in enzymes involved in the metabolism or biotransformation of CY had on CY and HCY disposition. Overall, 17-114% IIV and 12-103% IOV in CY and HCY PK parameters were observed. Body weight and age were the main covariates, which explained the largest portion of the IIV. In addition, CYP2C9 2explained a significant portion of the IIV in the clearance (P0.002) and thus the areaunder the concentration curve (P0.05) of CY. This covariate model may be used to design and plan targeted dose therapy in this group of pediatric patients, if clinical outcome association with CY PK are proved and target range established.

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Intl PMID:22231460 BS

Chandy, S., Ulrich, R. G., Schlegel, M., Petraityte, R., Sasnauskas, K., Prakash, D. J., Balraj, V., Abraham, P. and Sridharan, G.

Hantavirus Infection among Wild Small Mammals in Vellore, South IndiaZoonoses Public Health. 2012 Aug 1. doi: 10.1111/j.1863-2378.2012.01532.x. [Epub ahead of print]

Wild indigenous small mammals including 83 rodents (bandicoot and black rats, and house mice) and a shrew captured from multiple sites in Vellore, south India, were tested for serological and molecular evidence of hantavirus infection. Indirect immunofluorescence assay (IFA) using Hantaan virus (HTNV) antigen indicatedhantavirus-reactive antibodies in 16 (19.3%) of 83 rodents (bandicoot and black rats).Western blot (WB) using Thailand virus (THAIV) antigen confirmed hantavirus-reactive antibodies in nine of the 16 HTNV IFA-positive rodents. Reverse transcription polymerase chain reaction (RT-PCR) of lung and kidney tissue of captured mammals resulted in the detection of partial S segment sequence in a bandicoot rat. This study complements our earlier reports on hantavirus epidemiology in south India and documents first laboratory evidence for rodent-associated hantaviruses in south India.© 2012 Blackwell Verlag GmbH.

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Intl PMID:22856552 BS

Gorczyca, M. E., Nair, S. C., Jilma, B., Priya, S., Male, C., Reitter, S., Knoebl, P., Gilbert, J. C., Schaub, R. G., Dockal, M., Mcginness, K. E., Pabinger, I. and Srivastava, A.

Inhibition of tissue factor pathway inhibitor by the aptamer BAX499 improves clotting ofhemophilic blood and plasmaJournal of Thrombosis and Haemostasis; 2012, 10 (8): 1581-1590

Background: Tissue factor pathway inhibitor (TFPI) is the major inhibitor of tissue factor-initiated coagulation, making it an interesting and novel therapeutic target inhemophilia treatment. The aptamer BAX499 (formerly ARC19499) is designed to improve hemostasis by specifically inhibiting TFPI. Objectives: The aim of the study was to examine the concentration-dependent augmentation of clotting by BAX499. Methods:Whole blood clot formation was quantified by rotational thromboelastometry andthromboelastography, and thrombin generation in platelet-poor plasma was assessed with the calibrated automated thrombogram, in samples from patients with congenital hemophilia A (N= 55) and B (N=11), patients with acquired hemophilia A (N=1), and healthy controls (N= 37). Results: BAX499 significantly improved clotting of samples from hemophilic patients in a concentration-dependent manner, resulting in clotting profiles in samples from patients with severe hemophilia that were similar to those of healthy controls. Conclusion: BAX499 improved ex vivo clotting parameters in blood and plasma from patients with hemophilia A and B with different severity of disease, andalso in a patient with acquired hemophilia. These results further support the contention that anti TFPI strategies may be an effective treatment for hemophilic patients. © 2012International Society on Thrombosis and Haemostasis.

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Intl PMID:22632032 BS

Kavanagh, O., Zeng, X. L., Ramani, S., Mukhopadhya, I., Crawford, S. E., Kang, G. andEstes, M. K.

A time-resolved immunoassay to measure serum antibodies to the rotavirus VP6 capsid proteinJ Virol Methods. 2012 Nov 23. pii: S0166-0934(12)00377-1. doi:10.1016/j.jviromet.2012.11.003. [Epub ahead of print]

The rotavirus (RV) inner capsid protein VP6 is widely used to evaluate immune response during natural infection and in vaccine studies. Recombinant VP6 from the most prevalent circulating rotavirus strains in each subgroup (SG) identified in a birth cohort of children in southern India [SGII (G1P[8]) and SGI (G10P[11])] were produced. The purified proteins were used to measure VP6-specific antibodies in a Dissociation- Enhanced Lanthanide Fluorometric Immunoassay (DELFIA). The ability of the assay to detect a e"2 fold rise in IgG level in a panel of serum samples from a longitudinal study was compared to a gold standard virus-capture ELISA. A strong association was observed between the assays ($p < 0.001$; chi-squared test) with assay performancesremaining similar when the samples were subdivided as having a fold change increase inVP6 antibody levels (a) within 90 days of RV RNA detection in stool or (b) if no RV RNA was detected within that time period. This study demonstrates the suitability of using recombinant proteins to measure anti-RV immune responses and serves as a "proof of principle" to examine the antibody responses generated to other recombinant RV proteins and thereby possibly identify a correlate of protection.

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Intl PMID:23183143 BS

Kazi, A. I. and Oommen, A.

The effect of acute severe monocrotophos poisoning on inhibition, expression and activity of acetylcholinesterase in different rat brain regionsNeurotoxicology. 2012 Oct;33(5):1284-90. doi: 10.1016/j.neuro.2012.07.010. Epub2012 Aug 10.

Aim: This study examined the acute effects of severe monocrotophos (MCP) poisoning on AChE inhibition, mRNA expression and recovery of acetylcholinesterase activity indifferent regions of the rat brain. Study: Wistar rats were administered monocrotophos(0.8LD 50) by oral gavage to elicit severe effects of acute poisoning and were sacrificed2.5h, 24h, 7 days, 14 days and 1 month after poisoning. Acetylcholinesterse activity, mRNA and protein were assessed in cortex, striatum, hippocampus and cerebellum.Results: Acute monocrotophos administration resulted in significant AChE inhibition (50-82%) in the rat brain regions 2.5h after poisoning. AChE inhibition was associated with down regulation of synaptic AChE mRNA 24h after poisoning in cortex and striatum. Partial recovery of AChE activity was observed 24h after poisoning associated with increased catalytic efficiency (K m) of the enzyme. The recovery of AChE mRNA and protein levels to normal occurred in 7 days in cortex and cerebellum and over one month in striatum and hippocampus. Conclusion: Cholinergic neurotoxicity of acutesevere monocrotophos poisoning is characterized by high acetylcholinesterase inhibition, downregulation of acetylcholinesterase mRNA and slow recovery of acetylcholinesteraseactivity in brain regions. De novo synthesized acetylcholinesterase is associated withincreased catalytic efficiency that may contribute in restoring cholinergic function.

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Intl PMID:22903060 BS

Kolli, V. K., Abraham, P., Isaac, B. and Kasthuri, N.

Preclinical Efficacy of Melatonin to Reduce Methotrexate-Induced Oxidative Stress andSmall Intestinal Damage in RatsDig Dis Sci. 2012 Oct 10. [Epub ahead of print]

Background: Methotrexate is widely used as a chemotherapeutic agent for leukemia and other malignancies. The efficacy of this drug is often limited by mucositis and intestinalinjury, which are the major causes of morbidity in children and adults. Aim: The presentstudy investigates whether melatonin, a powerful antioxidant, could have a protective effect. Method: Rats were pretreated with melatonin (20 and 40 mg/kg body weight) daily 1 h before methotrexate (7 mg/kg body weight) administration for three

consecutive days. After the final dose of methotrexate, the rats were sacrificed and the small intestine was used for light microscopy and biochemical assays. Intestinal homogenates were used for assay of oxidative stress parameters malondialdehyde and protein carbonyl content, and myeloperoxidase activity, a marker of neutrophil infiltration as well as for the activities of the antioxidant enzymes. Result: Pretreatment with melatonin had a dose-dependent protective effect on methotrexate (MTX)-induced alterations in small intestinal morphology. Morphology was saved to some extent with 20 mg melatonin pretreatment and near normal morphology was achieved with 40 mg melatonin pretreatment. Biochemically, pretreatment with melatonin significantlyattenuated MTX-induced oxidative stress ($P < 0.01$ for MDA, $P < 0.001$ for proteincarbonyl content) and restored the activities of the antioxidant enzymes (glutathione reductase $P < 0.05$, superoxide dismutase $P < 0.01$). Conclusion: The results of the present study demonstrate that supplementation by exogenous melatonin significantly reduces MTX-induced small intestinal damage, indicating that it may be beneficial in ameliorating MTX-induced enteritis in humans. © 2012 Springer Science+Business Media New York.

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Intl PMID:23053903 BS

Lakshmana Gowda, K., Marie, M. A. M., Bindu Rani, S. R., Shivannavar, C. T. andBrahmadathan, K. N.

Anti-streptolysin o test in the diagnosis of group a beta hemolytic streptococcal pharyngitis in endemic regions: A preliminary studyAustralian Journal of Basic and Applied Sciences; 2012, 6 (9): 35-37

Antistreptolysin O titers were determined in school children colonized or infected with beta hemolytic streptococci using a rapid commercial latex agglutination kit. Seven (16.2%) of the 43 symptomatic children and five (4.8%) of the 105 asymptomatic children were ASO positive; all were from who were GAS+ve. Of the seven symptomatic children five had a titer of 200 IU/ml, one had a titer of 400 IU/ml and another had a titer of 1200 IU/ml; of the five asymptomatic children, three had titers of 400 IU/ml,one had 600 IU/ml and another 800 IU/ml. None with non-group A streptococci were positive for ASO. The percentage positivity of ASO among symptomatic and asymptomatic children was statistically significant (<0.05). We conclude that rapid ASO test is a useful adjunct in the diagnosis of GAS pharyngitis.

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Intl BS

Ramalingam, V. V., Mani, M., Sundaresan, V. C., Karunaiya, R. J., Sachithanandham, J. and Kannangai, R.

Daily quality control in CD3 + and CD4 + T cell estimation by the FACSCount system ata tertiary care center in South IndiaClinical and Vaccine Immunology; 2012, 19 (10): 1693-1696

CD4 + T cell count estimations are subject to high variations; hence, in this study, the previous day's tested samples were included routinely as the internal quality controls. The percentages of variation of the 2-day values were analyzed for 280 observations and the mean variation for CD4 + and CD3 + T cell counts ranged from 5.21% to9.66%. This method is a good internal quality control (IQC) procedure for the estimation of CD3 + and CD4 + T cell counts in resource-poor settings. Copyright © 2012,American Society for Microbiology. All Rights Reserved.

Address: Department of Clinical Virology, Christian Medical College, Vellore, India, was assayed biochemically. ETC complex activities were also assayed in colonic epithelial cells isolated from Swiss albino mice with dextran sodium sulfate (DSS)-induced colitis at various stages of induction of colitis. Mucosal nitrite levels and proteincarbonyl content were determined. Results: The activity of Complex II was significantly decreased in colonic biopsies from UC patients compared with controls, while activities of other mitochondrial complex were normal. Complex II activity was equally decreased in diseased and normal mucosa

in UC; the degree of reduction did not correlate with clinical, endoscopic, or histological grading of disease activity. In DSS-fed mice, a reduction in activity of Complex IV and Complex II was observed. Activity of other complex was not affected. Administration of aminoguanidine, an inducible nitric oxide synthase (iNOS) inhibitor, attenuated all parameters of colitis as well as the reductions in Complex IV and Complex II activity. Conclusions: Reduction in Complex II activity appears to be a specific change in UC, present in quiescent and active disease. Mitochondrial complex dysfunction occurs in DSS colitis in mice and appears to bemediated by nitric oxide. (Inflamm Bowel Dis 2012;) Copyright © 2012 Crohn's & ColitisFoundation of America, Inc.

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Intl PMID:22855396 BS

Sieper, J., Srinivasan, S., Zamani, O., Mielants, H., Choquette, D., Pavelka, K., Loft, A. G., Géher, P., Danda, D., Reitblat, T., Cantini, F., Ancuta, C., Erdes, S., Raffayová, H., Keat, A., Gaston, J. S. H., Praprotnik, S. and Vastesaeger, N.

Comparison of two referral strategies for diagnosis of axial spondyloarthritis: TheRecognising and Diagnosing Ankylosing Spondylitis Reliably (RADAR) studyAnn Rheum Dis. 2012 Oct 13. [Epub ahead of print]

Objective: To determine which of two referral strategies, when used by referring physicians for patients with chronic back pain (CBP), is superior for diagnosing axial spondyloarthritis (SpA) by rheumatologists across several countries. Methods: Primary care referral sites in 16 countries were randomised (1?:?1) to refer patients with CBP lasting >3 months and onset before age 45 years to a rheumatologist using either strategy 1 (any of inflammatory back pain (IBP), HLA-B27 or sacroiliitis on imaging) or strategy 2 (two of the following: IBP, HLA-B27, sacroiliitis, family history of axial SpA, good response to non-steroidal anti-inflammatory drugs, extra-articular manifestations). The rheumatologist established the diagnosis. The primary analysis compared the proportion of patients diagnosed with definite axial SpA by referral strategy. Results: Patients (N=1072) were referred by 278 sites to 64 rheumatologists: 504 patients by strategy 1 and 568 patients by strategy 2. Axial SpA was diagnosed in 35.6% and39.8% of patients referred by these respective strategies (between-group difference4.40%; 95% CI -7.09% to 15.89%; p=0.447). IBP was the most frequently used referral criterion (94.7% of cases), showing high concordance (85.4%) with rheumatologists' assessments, and having sensitivity and a negative predictive value of>85% but a positive predictive value and specificity of <50%. Combining IBP with other criteria (eg, sacroiliitis, HLA-B27) increased the likelihood for diagnosing axial SpA. Conclusions: A referral strategy based on three criteria leads to a diagnosis of axial SpA in approximately 35% of patients with CBP and is applicable across countries and geographical locales with presumably different levels of expertise in axial SpA. Copyright Article author (or their employer) 2012.

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Intl PMID:23065731 BS

Snekalatha, S. and Kanthakumar, P.

Increase in voltage gated potassium currents of human lymphocytes on culture Indian Journal of Experimental Biology; 2012, 50 (8): 587-590

Voltage gated potassium channels present in T lymphocytes play an important role during lymphocyte activation. Though an increase in potassium currents has been reported in activated lymphocytes, changes in potassium currents in culture without activation by antigen or mitogen has not been reported. The peak potassium current densities on day 1 and day 5 of culture have been compared in this study. Peripheral blood mononuclear cells (PBMCs) were separated by density gradient centrifugation. Lymphocytes were separated from PBMCs by negative selection using anti-CD14 coated magnetic beads and cultured under appropriate conditions without antigenic or mitogenic stimulation. Lymphocytes were patched on day 1 or day 5 of culture. Voltagegated potassium currents were recorded by whole cell patch clamp technique using adepolarizing protocol. The mean of peak current densities recorded at +60 mV on day 1 of culture was 228.12± 89.39 pA/pF (n=7) and on day 5 of culture was 468.96 ±192.07 pA/pF (n=7). The difference between the current densities on day 1 and day 5 was found to be significant. Change in electrophysiological characteristics can lead tofunctional changes in the lymphocytes and this should be considered when culturing lymphocytes in vitro for research and clinical use.

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Nat PMID:23016497 BS

Sukumaran, A., Varghese, J., Tamilselvan, J., Jeyaseelan, V., Mani, T., Simpson, R. J., Mckie, A. T. and Jacob, M.

Effects of acute and chronic inflammation on proteins involved in duodenal iron absorption in mice: A time-course studyBritish Journal of Nutrition; 2012, 108 (11): 1994-2001,

In order to understand better the molecular mechanisms involved in the pathogenesis of anaemia of inflammation, we carried out a time-course study on the effects ofturpentine-induced acute and chronic inflammation on duodenal proteins involved in Feabsorption in mice. Expression levels of these proteins and hepatic hepcidin and serum Fe levels were determined in inflamed mice. In acutely inflamed mice, significantly increased expression of ferritin was the earliest change observed, followed by decreased divalent metal transporter 1 expression in the duodenum and increased hepcidin expression in the liver. Ferroportin expression increased subsequently, despite high levels of hepcidin. Hypoferraemia, which developed at early time periods studied, was followed by increased serum Fe levels at later points. The present results thus show that acute inflammation induced several changes in the expression of proteins involved in duodenal Fe absorption, contributing to the development of hypoferraemia. Resolutionof inflammation caused attenuation of many of these effects. Effects in chronically inflamed mice were less consistent. The present results also suggest that inflammation- induced increases in ferritin appeared to override the effects of hepcidin on the expression levels of ferroportin in enterocytes.

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Intl PMID:22360813 BS

Tyagi, M. G. and Babu Vimalanathan, A.

Evaluation of phospholipase C enzyme activity in goat endometrial cells, Research Journal of Pharmaceutical, Biological and Chemical Sciences; 2012, 3 (2):721-724

The phospholipase C enzyme is now known to have has six isoforms i.e phospholipase C(ã,ä â, å, æ, ç). Activation of phospholipase C results inthe generation of inositol phosphates and increased intracellular calcium along with production of diacylglycerol. Diacylglycerol remains bound to the membrane, and IP 3 is released as a soluble structure into the cytosol. The posterior pituitary hormone vasopressin activates the various phospholipase enzymes including the phospholipase C. In this article the technique to estimate the phospholipase C activity in goat endometrial cells is described.

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Intl BS

Varatharajan, S., Abraham, A., Zhang, W., Shaji, R. V., Ahmed, R., George, B., Srivastava, A., Chandy, M., Mathews, V. and Balasubramanian, P.

Carbonyl reductase 1 expression influences daunorubicin metabolism in acute myeloid leukemiaEuropean Journal of Clinical Pharmacology; 2012, 68 (12): 1577-1586

Purpose The present study aimed to investigate the role of expression of daunorubicin- metabolizing enzymes carbonyl reductase 1 and 3 (CBR1 and CBR3) on the in vitrocytotoxicity of daunorubicin in primary acute myeloid leukemia (AML) cells and theeffect of genetic variants in CBR1 and CBR3 on the plasma pharmacokinetics of daunorubicin and daunorubicinol (DOL) in AML patients. Methods RNA expression of CBR1 and CBR3, intracellular daunorubicin and DOL levels, and in vitro cytotoxicity of daunorubicin were measured in bone marrow mononuclear cells of 104 adult AML patients. Plasma pharmacokinetics of daunorubicin and DOL was measured in 24 patients receiving daunorubicin-based induction chemotherapy for AML. Results Increased expression of CBR1 significantly reduced the in vitro cytotoxicity of daunorubicin and also positively correlated with intracellular DOL levels. Polymorphisms in CBR1 and CBR3 did not show any association with intracellular daunorubicin or DOL levels, but there was a trend towards significant increase in plasma daunorubicin systemic exposure in patients with a variant genotype for CBR1 polymorphism rs25678. Conclusions This pilot study suggests that CBR1 RNA expression may be helpful in identifying AML patients at risk of developing resistance or toxicity to daunorubicin due to increased formation of DOL. Further confirmation of these findings in a larger sample pool would be required to determine the applicability of these results. Inhibition of CBR1 can be an option to improve the efficacy and prevent toxicity related to the treatment. Influence of daunorubicin and DOL plasma levels on clinical outcome, if any, remains to be evaluated. © Springer-Verlag 2012.

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Intl PMID:22562609 BS

Zhao, M., Ross, J. T., Itkin, T., Perry, J. M., Venkatraman, A., Haug, J. S., Hembree, M. J., Deng, C. X., Lapidot, T., He, X. C. and Li, L.

FGF signaling facilitates postinjury recovery of mouse hematopoietic systemBlood; 2012, 120 (9): 1831-1842

Previous studies have shown that fibroblast growth factor (FGF) signaling promotes hematopoietic stem and progenitor cell (HSPC) expansion in vitro. However, it is unknown whether FGF promotes HSPC expansion in vivo. Here we examined FGF receptor 1 (FGFR1) expression and investigated its in vivo function in HSPCs. Conditional knockout (CKO) of Fgfr1 did not affect phenotypical number of HSPCs and homeostatic hematopoiesis, but led to a reduced engraftment only in the secondary transplantation. When treated with 5-fluorouracil (5FU), the Fgfr1 CKO mice showed defects in both proliferation and subsequent mobilization of HSPCs. We identifiedmegakaryocytes (Mks) as a major resource for FGF production, and further discovered a novel mechanism by which Mks underwent FGF-FGFR signaling dependent expansion to accelerate rapid FGF production under stress. Within HSPCs, we observed an up-regulation of nuclear factor êB and CXCR4, a receptor for the chemoattractant SDF-1, inresponse to bone marrow damage only in control but not in Fgfr1 CKO model, accounting for the corresponding defects in proliferation and migration of HSPCs. This study provides the first in vivo evidence that FGF signaling facilitates postinjury recovery of the mouse hematopoietic system by promoting proliferation and facilitating mobilization of HSPCs.

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Intl PMID:22802336 BS

Ankichetty, S., Angle, P., Joselyn, A., Chinnappa, V. and Halpern, S.

Anesthetic considerations of parturients with obesity and obstructive sleep apneaJournal of Anaesthesiology Clinical Pharmacology; 2012, 28 (4): 436-443

Obstructive sleep apnea (OSA) is characterized by upper airway collapse and obstruction during sleep. It is estimated to affect nearly 5% of the general female population. Obesity is often associated with OSA. The physiological changes associated with pregnancy may increase the severity of OSA with a higher risk of maternal and fetal morbidity. However, very few parturients are diagnosed during pregnancy. These undiagnosed parturients pose great challenge to the attending anaesthesiologist during the perioperative period. Parturients at risk should be screened for OSA, and if diagnosed, treated. This reviewdescribes the anaesthetic concerns in obese parturients at risk for OSA presenting to the labor and delivery unit.

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Intl PMID:23225920 MISC

Baglin, T., Bauer, K., Douketis, J., Buller, H., Srivastava, A. and Johnson, G.

Duration of anticoagulant therapy after a first episode of an unprovoked pulmonaryembolus or deep vein thrombosis: Guidance from the SSC of the ISTH Journal of Thrombosis and Haemostasis; 2012, 10 (4): 698-702

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Intl PMID:22332937 MISC

Bhan, A., Bhide, A. V., Daniel, S., Galgali, R. B., Isaac, P., Lewin, S., Machado, T., Murthy, P., Pulimood, A. B., Rajaraman, D., Rao, S., Ravindran, D. G., Kurpad, S. S. and Thomas,G.

A consensus document requesting the Medical Council of India to take action on the issue of boundary violations in doctor-patient relationshipsNational Medical Journal of India; 2012, 25 (2): 96-98

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Nat PMID: 22816167 MISC

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The finding of anticardiolipin autoantibodies in patients with pseudoexfoliation syndrome requires further evaluationJournal of Glaucoma; 2012, 21 (3): 206

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Intl PMID:22366696 MISC

Bhan, A., Bhide, A. V., Isaac, P., Thomas, G., Murthy, P., Pulimood, A. B., Rao, S., Daniel, S., Galgali, R. B., Lewin, S., Rajaraman, D., Machado, T., Ravindran, G. D. and Kurpad, S.S.

Boundary violations: Our response to the commentaries on the Bangalore DeclarationNational Medical Journal of India; 2012, 25 (5): 311-312

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Nat PMID:23448640 MISC

Chase, D.

Letter in response to the original article: " Evaluation of femoral approach to coronary sinus catheterisation in electrophysiological and ablation procedures: Single centre experience" authored by Osama Abdel Atty, Mohamed Morsy and Mark M. Gallagher (Journal of the Saudi Heart Association, Volume 23, Issue 4, October 2011, pp. 213-216)

Journal of the Saudi Heart Association; 2012, 24 (2): 145

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Intl MISC

Chrispal, A.

Cleistanthus collinus poisoningJournal of Emergencies, Trauma and Shock; 2012, 5 (2): 160-166

Cleistanthus collinus, a toxic shrub, is used for deliberate self-harm in rural South India. MEDLINE (PUBMED) and Google were searched for published papers using the search/MeSH terms "Cleistanthus collinus," "Euphorbiaceae," "Diphyllin," "Cleistanthin A," Cleistanthin B" and "Oduvanthalai." Non-indexed journals and abstracts were searched by tracing citations in published papers. The toxic principles in the leaf include arylnaphthalene lignan lactones-Diphyllin and its glycoside derivatives Cleistanthin A and B. Toxin effect in animal models demonstrate neuromuscular blockade with muscle weakness, distal renal tubular acidosis (dRTA) and type 2 respiratory failure with conflicting evidence of cardiac involvement. Studies suggest a likely inhibition of thiol/thiol enzymes by the lignan-lactones, depletion of glutathione and ATPases in tissues. V-type H+ ATPase inhibition in the renal tubule hasbeen demonstrated. Mortality occurs in up to 40% of C. collinus poisonings. Human toxicity results in renal tubular dysfunction, commonly dRTA, with resultant hypokalemia and normal anion gap metabolic acidosis. Aggressive management of these metabolicderangements is crucial. Acute respiratory distress syndrome (ARDS) is seen in severecases. Cardiac rhythm abnormalities have been demonstrated in a number of clinical studies, though the role of temporary cardiac pacemakers in reducing mortality is uncertain. Consumption of decoctions of C. collinus leaves, hypokalemia, renal failure, severe metabolic acidosis, ARDS and cardiac arrhythmias occur in severe poisonings and predict mortality. Further study is essential to delineate mechanisms of organ injury and interventions, including antidotes, which will reduce mortality. © 2010 Expert Reviews Ltd.

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Intl PMID:22787347 MISC

David, S., Jayandharan, G. R., Abraham, A., Jacob, R. R., Devi, G. S., Patkar, N., Shaji, R. V., Nair, S. C., Viswabandya, A., Ahmed, R., George, B., Mathews, V., Chandy, M. andSrivastava, A.

Molecular basis of Wiskott-Aldrich syndrome in patients from IndiaEuropean Journal of Haematology; 2012, 89 (4): 356-360

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Intl PMID:22679904 MISC

Dutta, A. K., Chacko, A., Balekuduru, A., Sahu, M. K. and Gangadharan, S. K.

Time trends in epidemiology of peptic ulcer disease in India over two decadesIndian Journal of Gastroenterology; 2012, 31 (3): 111-115

Background: Epidemiology of peptic ulcer disease (PUD) in India differs from that in theWest. It may have undergone a change with recent improvement in hygiene and availability of potent antisecretory and ulcerogenic drugs. We therefore tried to assess time-trends in the frequency of PUD over the past two decades. Methods: Records of patients with uninvestigated dyspepsia and no alarm symptoms who had undergone upper gastrointestinal endoscopy at our institution during the years 1988 (n = 2,358), 1992 (n =2,240), 1996 (n = 5,261), 2000 (n = 7,051), 2004 (n = 5,767) and 2008 (n = 7,539) were retrospectively reviewed. The frequencies of duodenal and gastric ulcer disease in these groups were compared. Results: Of the 30,216 patients (age:41.7±12.7 years, 34 %females) during the six study periods, 2,360 (7.8 %) had PUD. The frequencies of bothduodenal ulcer and gastric ulcer showed a decline from 1988 to 2008, i. e. from 12 % to2.9 % and 4.5 % to 2.7 %, respectively (p-value <0.001 for trend for each). The decline was more marked for duodenal ulcer, and the ratio of duodenal to gastric ulcer declinedfrom 2.7 in 1988 to 1.1 in 2008. Conclusions: The epidemiology of PUD in India may havechanged in the past two decades with the incidence of duodenal ulcer declining more rapidly than that of gastric ulcer. © 2012 Indian Society of Gastroenterology.

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Nat PMID: 22766645 MISC

Eapen, C. E.

Copper and liver diseaseGut. 2012 Jan;61(1):63. doi: 10.1136/gutjnl-2011-301743. No abstract available. Erratum in: Gut. 2012 May;61(5):773Kumar, Suresh [added]; Fleming, J J [added]; Ramakrishna, B [added]; Abraham, L[added]; Ramachandran, J [added].

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Intl PMID:22139599 MISC

Eapen, C. E., Kumar, S., Fleming, J. J., Ramakrishna, B., Abraham, L. and Ramachandran, J.

Gut tutorial, Copper and liver disease (Gut (2012) 61, (63) DOI: 10.1136/gutjnl-2011-301743)Gut; 2012, 61 (5): 773

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Intl MISC

Goodeve, A. C., Perry, D. J., Cumming, T., Hill, M., Jennings, I., Kitchen, S., Walker, I., Gray, E., Jayandharan, G. R. and Tuddenham, E.

Genetics of haemostasisHaemophilia; 2012, 18 (SUPPL.4): 73-80

Congenital defects of platelets or plasma proteins involved in blood coagulation generally lead to bleeding disorders. In some of these disorders, patients with a severe phenotypeare prone to spontaneous bleeds with critical consequences. This situation occurs morecommonly in haemophilia A and haemophilia B and to a certain extent in severe forms (type 3) of von Willebrand disease. Defects in other plasma coagulation proteins and platelet factors are relatively rare, with an incidence of d”1: 1-2 million. Molecular geneticstudies of the human coagulation factors, especially factors VIII and IX, have contributed to a better understanding of the biology of these genetic disorders, the accurate detection of carriers and genetic counselling, and have also fostered new therapeutic strategies. This article reviews the evolution of genetics over the last five decades as a tool for bleeding disorder investigations, the recent advances in molecular techniques that have contributed to improved genetic diagnosis of this condition, and the development and utility of proficiency testing programmes and reference materials for genetic diagnosis of bleeding disorders. © 2012 Blackwell Publishing Ltd.

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Intl PMID:22726087 MISC

Jacob Jose, V.

Elevated blood pressure & effectiveness of comprehensive risk reduction programmeIndian Journal of Medical Research; 2012, 135 (4): 454-455

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Nat PMID:22664490 MISC

Jacob, K. S.

Religion from a science perspectiveNational Medical Journal of India; 2012, 25 (5): 294-295

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Nat PMID:23448632 MISC

Jacob, K. S.

Randomized controlled trials, evidence-based medicine and IndiaNational Medical Journal of India; 2012, 25 (1): 1-4

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Nat PMID:22680311 MISC

Jacob, K. S.

Psychiatric assessment and the art and science of clinical medicineIndian Journal of Psychiatry; 2012, 54 (2): 184-187

The decline of phenomenology was associated with the corresponding rise of operational criteria for psychiatric diagnosis. Detailed and nuanced evaluations were replaced by symptom checklists, the diversity of clinical phenomena reduced to a few "typical symptom" and contexts ignored in favor of symptom criteria. This article highlights some issuesrelated to the art and the science of clinical examination. It includes conceptual models, matching patients with typical typologies, cross-sectional and longitudinal perspectives,symptom checklists and contexts, population characteristics, prevalence and predictivevalues, demarcation of abnormalities, and the Bayesian approach to diagnosis. The challenge is to rekindle the interest in phenomenology, appreciate the complexity of the task of psychiatric assessment and to teach the principles of clinical examination.

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Nat PMID:22988328 MISC

Jacob, K. S. and Kuruvilla, A.

Psychotherapy across cultures: The form-content dichotomyClinical Psychology and Psychotherapy; 2012, 19 (1): 91-95

The diversity of patients, problems, beliefs and cultures mandates the need to educate, match, negotiate and integrate psychological interventions. This is necessary in all culturesand in every setting. Many schools of psychotherapy offer specific theories and particulartechniques, yet they share many common approaches. Their individual techniques allow therapists form and structure to treat different clinical problems, discuss diverse content and use them in varied settings and among people with assorted cultural backgrounds. The heterogeneity within cultures, regions and populations demands that therapists understand the local and individual reality. The apparent contradictions between standard psychologicaltherapies and their use across cultures, when viewed through a form-content framework,allow for matching strategies for specific individuals and their distress, and for choosing the best treatment

options from a diverse therapeutic armamentarium. Psychotherapies are at their weakest when they attempt to provide explanations across cultures and are at their strongest when they are used as vehicles for engagement with patients. The challenge is to find a common psychotherapeutic language, which attempts to bridge the divide between the issues facing the patient and the armamentarium of the therapist. The form-content paradigm at least partly explains the complexity of the issues within psychotherapy. It also allows the therapist to move from the therapy-centric orientation of Western approaches to the patient-centric orientations required for success in psychological therapies. © 2010John Wiley & Sons, Ltd.

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Intl PMID:22232048 MISC

Jagai, J. S., Sarkar, R., Castronovo, D., Kattula, D., Mcentee, J., Ward, H., Kang, G. andNaumova, E. N.

Seasonality of rotavirus in south asia: A meta-analysis approach assessing associations with temperature, precipitation, and vegetation indexPLoS One. 2012;7(5):e38168. doi: 10.1371/journal.pone.0038168. Epub 2012 May 31

Background: Rotavirus infection causes a significant proportion of diarrhea in infants and young children worldwide leading to dehydration, hospitalization, and in some cases death. Rotavirus infection represents a significant burden of disease in developing countries, suchas those in South Asia. Methods: We conducted a meta-analysis to examine how patterns ofrotavirus infection relate to temperature and precipitation in South Asia. Monthly rotavirus data were abstracted from 39 published epidemiological studies and related to monthly aggregated ambient temperature and cumulative precipitation for each study location using linear mixed-effects models. We also considered associations with vegetation index, gathered from remote sensing data. Finally, we assessed whether the relationship varied in tropical climates and humid mid-latitude climates. Results: Overall, as well as in tropicaland humid mid-latitude climates, low temperature and precipitation levels are significant predictors of an increased rate of rotaviral diarrhea. A 1°C decrease in monthly ambient temperature and a decrease of 10 mm in precipitation are associated with 1.3% and 0.3% increase above the annual level in rotavirus infections, respectively. When assessing lagged relationships, temperature and precipitation in the previous month remained significant predictors and the association with temperature was stronger in the tropical climate. The same association was seen for vegetation index; a seasonal decline of 0.1 units results in a3.8% increase in rate of rotavirus. Conclusions: In South Asia the highest rate of rotavirus was seen in the colder, drier months. Meteorological characteristics can be used to better focus and target public health prevention programs.

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Intl PMID:22693594 MISC

James, J., Gnanapragasam, H. P. and Sangeetha, G.

Causes and epidemiology of vaccine preventable infectious bacterial disease: The prospect and short out coming of vaccineInternational Journal of Pharmacy and Pharmaceutical Sciences; 2012, 4 (1): 51-54

Emerging infectious bacterial diseases are an imperishable threat to the improve health and sustainability of the Indian citizens. Vaccination is a cost-efficient and safe methodpracticed to prevent the infectious diseases spread in India and worldwide. The three major pathogens causing meningitis N. meningitidis, Streptococcus pneumoniae, and Haemophilusinfluenzae type b (Hib) are vaccine preventable bacterial disease. Monitoring the effectiveness of pneumococcal polysaccharide-protein conjugate vaccines and Hib-conjugatevaccines is crucial prior to vaccine implementation. Recognition of the possible potential pathogen in hospital settings in many developing countries is challenged due to theinadequate resources and clear operational

procedures. Thus, because of poor recognition, improper infrastructure and surveillance systems, developing a novel conjugate vaccines for pneumococci and Haemophilus is unlikely. In spite of global importance, the problems and difficulties in diagnosis impedes the capacity to obtain accurate information on disease burden and assessment of the potential of vaccination. International and national effortsare made and still continue for the introduction of vaccine and studies indicates the efficacy of vaccine in eradication of the. Accurate evaluations of the infectious disease and the economic needs to prevent these infections have to be calculated since their global nature presents a danger to the health of people and also paralyze the economy of nation. **Address:** Department of Microbiology, Christian Medical College, Vellore, IndiaUniversal College of Medical Sciences, Tribhuvan University, Bhairahawa, Nepal, IndiaCentral Leprosy Teaching and Research Institute, Chengalpattu, India

Intl MISC

Jayandharan, G. and Srivastava, A.

Role of molecular genetics in hemophilia: From diagnosis to therapySeminars in Thrombosis and Hemostasis; 2012, 38 (1): 64-78

Despite significant advancements, state-of-the-art care remains inaccessible to patientswith hemophilia, especially those from developing countries. Thus, innovative approaches in the management of this condition are needed to improve their quality of life. In thiscontext, genetic studies in hemophilia have contributed to the better understanding of its biology, the detection of carriers, and prenatal diagnosis, and even fostering newertherapeutic strategies. This article reviews the applications of molecular genetics in hemophilia, in general, and how such techniques can be useful for optimizing patient care,in particular.© 2012 by Thieme Medical Publishers, Inc.

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Intl PMID:22314605 MISC

Kamath, M. S. and Bhattacharya, S.

Demographics of infertility and management of unexplained infertilityBest Practice and Research: Clinical Obstetrics and Gynaecology; 2012, 26 (6): 729-738

The cause of infertility is unexplained in about 22-28% of all infertile couples. The prognosis for spontaneous pregnancy in such couples is better than in those with diagnosed causes of infertility. Traditional treatment options in this group have included expectant management,clomifene citrate, intrauterine insemination with (super ovulation plus intrauterineinsemination) or without (intrauterine insemination) super ovulation and in-vitro fertilisation. Despite being more expensive, empirical clomifene and intrauterine insemination in an unstimulated cycle do not improve the chances of live birth compared with expectant management. Although unlikely to be more effective than no treatment in couples with a reasonably good prognosis, super ovulation plus intrauterine insemination has been shown to be more effective than intrauterine insemination. Any potential advantage of super ovulation plus intrauterine insemination has to be balanced against the relatively high risk of iatrogenic multiple pregnancy. In-vitro fertilisation remains the treatment of choice in longstanding unresolved infertility and, when coupled with the use of elective single embryo transfer, can minimise the risk of multiple pregnancies. Data from randomised trials confirming the superiority of in-vitro fertilisation over expectant management is limited.

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Intl PMID:22951769 MISC

Kannangai, R., David, S. and Sridharan, G.

Human immunodeficiency virus type-2-A milder, kinder virus: An updateIndian Journal of Medical Microbiology; 2012, 30 (1): 6-15

Human immunodeficiency virus type-2 (HIV-2) belongs to the family retroviridae which is phylogenetically clusters with SIV SM from sooty mangabeys. This virus is morphologically similar to human immunodeficiency

virus type-1 (HIV-1) but has got only a 40% homology at the nucleotide level. There is a distinct geographical distribution of HIV-2 unlike HIV-1. There are currently eight subtypes/groups identified with subtype/group A responsible for the majority of infections. HIV-2 shows a considerable difference in the course of the disease. Clinical, haematological and immunological evaluation of individuals infected with HIV-2 has shown the virus to be less pathogenic than HIV-1 although the exact mechanism underlying this difference is not well defined. Similar to HIV-1, the HIV-2 isolates also showed distinct replicative and cytopathic characteristics. The transmission rate for HIV-2 compared to HIV-1 is very low both by heterosexual route and mother to childtransmission. The clinical signs and symptoms of immunodeficiency associated with HIV-2 are similar to the ones seen among the HIV-1-infected individuals and they can also progress to AIDS. It is naturally resistant to NNRTI and hence the diagnosis become important as it affects the treatment strategy. Similar to HIV-1, HIV-2 strains of infected individuals also show mutations that can cause drug resistance. The current evidence suggests that there is no protective effective for HIV-2 against HIV-1.

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Nat PMID:22361754 MISC

Kekre, N.

Should Mr. Aamir Khan apologize - Medical professionalism in crisisIndian Journal of Urology; 2012, 28 (2): 121-122

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Nat PMID:22919125 MISC

Kekre, N. S.

The rise and rise of technology in urology- Cost-effective medicine vs. new treatmentsIndian Journal of Urology; 2012, 28 (4): 375-376

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Nat PMID:23450941 MISC

Kekre, N. S.

Scientific misconduct - Why we must be carefulIndian Journal of Urology; 2012, 28 (3): 247

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Nat PMID:23204648 MISC

Kekre, N. S.

Is LESS is actually more Indian Journal of Urology; 2012, 28 (1): 1-2

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Nat PMID:22557708 MISC

Kumar, S.

Takayasu's arteritis: Paediatric perspectiveIndian Journal of Rheumatology; 2012, 7 (1 SUPPL.): 99-105

Takayasu's arteritis (TA) is a rare chronic granulomatous vasculitis of the aorta and its branches and is associated with considerable morbidity and premature mortality. Initial symptoms and signs are non-specific. High index of suspicion is needed to make the correct diagnosis. The clinical manifestations in paediatric patients are less specific than in adults:in children, the disease presents with fever, arthralgias and hypertension. In this review, we detail the epidemiology, pathophysiology, clinical features, imaging characteristics, and various treatment options for TA in children. © 2012 Indian Rheumatology Association.

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Nat MISC

Kumar, S. S., Kurian, G., Eapen, C. E. and Roberts, E. A.

Genetics of Wilson's disease: A clinical perspectiveIndian Journal of Gastroenterology; 2012, 31 (6): 285-293

Hepatic Wilson's disease is often a difficult diagnosis to confirm. This review examines the current role of genetic tests for Wilson's disease and is aimed at clinicians caring for patients with this disease. We discuss how genetic testing is carried out for Wilson'sdisease, indications for these tests, and genetic counseling for the family. In contrast to the advances in diagnosis of Wilson's disease by testing for ATP7B

mutations, genotype- phenotype correlations are not yet sufficiently established. The non-Wilsonian copper overload syndromes causing cirrhosis in children are another important area for study. The review also identifies further areas for research into the genetics of Wilson's disease in India. © 2012 Indian Society of Gastroenterology.

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Nat PMID:22941676 MISC

Laishram, S., Kang, G. and Ajjampur, S. S. R.

Giardiasis: A review on assemblage distribution and epidemiology in IndiaIndian Journal of Gastroenterology; 2012, 31 (1): 3-12

Giardiasis is a significant cause of diarrheal disease and associated morbidity in children and adults worldwide. In addition to diarrhea, it can also lead to malnutrition and cognitive deficits in children from developing countries. Giardia duodenalis is considered to be a species complex of several assemblages, of which assemblage A and B are predominantly associated with human infections. Assemblage type has been associated with risk of occurrence of symptoms and duration of illness. Hence genotyping of giardial isolates may help understand better the epidemiology and transmission ecology of the disease in a particular setting or area. In India, prevalence rates of Giardia infection in patients with diarrhea range from 0. 4% to 70%, and asymptomatic cyst passage has been found to beas high as 50% in rural southern India. In this review, the global distribution of giardial assemblage, zoonotic transmission and the association of assemblage with disease have been discussed, followed by epidemiology of giardiasis in India. © 2012 Indian Society of Gastroenterology.

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Nat PMID:22311296 MISC

Madhuri, V., Dutt, V., Samuel, K. and Gahukamble, A. D.

Authors' replyIndian Journal of Orthopaedics; 2012, 46 (1): 115

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Nat PMID:22345822 MISC

Madhuri, V., Dutt, V., Samuel, K. and Gahukamble, A. D.

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Nat PMID:22345820 MISC

Mammen, S., Keshava, S. N., Moses, V., Babu, S. and Varughese, S.

Pictorial essay: Interventional radiology in the management of hemodialysis vascular access- A single-center experienceIndian Journal of Radiology and Imaging; 2012, 22 (1): 14-18

Chronic kidney disease (CKD) is a worldwide public health problem and is associated with high morbidity and mortality. The majority of patients with CKD stage 5 (CKD-5), who cannot undergo renal transplant, depend on maintenance hemodialysis by surgically created access sites. Native fistulae are preferred over grafts due to their longevity. Morethan half of these vital portals for dialysis access will fail over time. Screening procedures to select high-risk patients before thrombosis or stenosis appears have resulted in aggressive management. These patients are referred for angiographic evaluation and/or therapy. Wepresent the patterns of dialysis-related interventions done in our institution.

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Nat PMID:22623809 MISC

Michael, J. S. and Jacob John, T.

Extensively drug-resistant tuberculosis in India: A reviewIndian Journal of Medical Research; 2012, 136 (4): 599-604

Background & objectives: Extensively drug resistant tuberculosis (XDR-TB) has become a new threat for the control of TB in many countries including India. Its prevalence is not known in India as there is no nation-wide surveillance. However, there have been some reports from various hospitals in the country. Methods: We have reviewed the studies/information available in the public domain and found data from 10 tertiary care centres in 9 cities in India. Results: A total of 598 isolates of XDR Mycobacterium tuberculosis have been reported in the studies included. However, the reliability of microbiological methods used in these studies was not checked and thus the XDR-TB data remained invalidated in reference laboratories. Interpretation & conclusions: Systematic surveillance and containment interventions are urgently needed.

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Nat PMID:23168700 MISC

Miles, M. G., Lewis, K. D. C., Kang, G., Parashar, U. D. and Steele, A. D.

A systematic review of rotavirus strain diversity in India, Bangladesh, and Pakistan Vaccine; 2012, 30 (SUPPL. 1): A131-A139Of the estimated half-million deaths from rotavirus globally each year, approximately one- third (N= 160,000 deaths) occur in the Indian subcontinent (defined as India, Bangladesh, and Pakistan).

Two commercial vaccines are available for use and recommended by WHO, although the prohibitive vaccine price has limited their introduction into routine childhood immunization programs. New rotavirus vaccines are in late clinical development, including two advanced candidates in India. As significant shifts in rotavirus strain diversity have occurred in the past three decades and questions remain regarding whether strain replacement may occur following introduction of rotavirus vaccines, it is important to understand the temporal and regional strain diversity profile before vaccine introduction. We reviewed 33 peer-reviewed manuscripts from the Indian subcontinent and found thatthe most common G-types (G1-4) and P-types (P[4] and P[8]) globally accounted for three- fourths of all strains in the subcontinent. However, strains varied by region, and temporalanalysis showed the decline of G3 and G4 in recent years and the emergence of G9 andG12. Our findings underscore the large diversity of rotavirus strains in the Indian subcontinent and highlight the need to conduct surveillance on a regional scale to better understand strain diversity before and after rotavirus vaccine introduction. © 2012.

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Intl PMID:22520122 MISC

Naik, G. S. and Tyagi, M. G.

A Pharmacological Profile of Ribavirin and Monitoring of its Plasma Concentration in Chronic Hepatitis C Infection*Journal of Clinical and Experimental Hepatology*, Volume 2, issue 1 (March, 2012), p. 42-54.

ISSN: 0973-6883 DOI: 10.1016/S0973-6883(12)60090-5Chronic hepatitis C (CHC) infection, usually an asymptomatic infection, has long-term serious complications such as cirrhosis, hepatocellular carcinoma, and end-stage liverdisease requiring liver transplantation (LT). Several novel drugs against hepatitis C whichform part of 'specifically targeted antiviral therapy for hepatitis C' (STAT-C) have been developed. These include NS3/4A protease inhibitors telaprevir, boceprevir, and nucleoside/non-nucleoside polymerase inhibitors (NS5A) which hold promise for future therapy. Despite the development of new anti-hepatitis C virus (HCV) drugs, ribavirin (RBV) remains the single most important drug to prevent relapse and is frequently includedamong newer regimens being developed with novel small molecule anti-HCV drugs. The current approved treatment is a combination therapy of once weekly subcutaneous pegylated-interferon (PEG-IFN)-á plus body-weight-based oral RBV regimen. The most significant dose-dependent side effect of RBV is hemolytic anemia warranting dose reduction or discontinuation in severe cases compromising sustained virological response (SVR). Monitoring RBV plasma concentration has been challenging due to its peculiar pharmacokinetics and has been done to predict both efficacy and toxicity. Herein, we review the pharmacological profile of RBV and the monitoring of its plasma

concentration,monitoring in renal impairment, post-LT, and human immunodeficiency virus (HIV)-HCV co-infection in patients being treated with combination therapy of PEG-IFN-á and RBV. © 2012INASL.

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Intl MISC

Nandhakumar, A., Mccluskey, S. A., Srinivas, C. and Chandy, T. T.

Liver transplantation: Advances and perioperative careIndian Journal of Anaesthesia; 2012, 56 (4): 326-335

Liver transplantation is one of the treatments for many-life threatening liver diseases. Numerous advances in liver transplant surgery, anaesthesia and perioperative care haveallowed for an increasing number of these procedures. The purpose of this review is toconsider some of the important advances in perioperative care of liver transplant patients such as pre-operative evaluation, intraoperative monitoring and management and early extubation. A PubMed and EMBASE search of terms “Anaesthesia” and “Liver Transplantation” were performed with filters of articles in “English”, “Adult” and relevant recent publications of randomised control trial, editorial, systemic review and non-systemic review were selected and synthesized according to the author’s personal and professional perspective in the field of liver transplantation and anaesthesia. The article outlines strategies in organ preservation, training and transplant database for further research.

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Nat PMID:23087453 MISC

Peedicayil, J.

The role of DNA methylation in the pathogenesis and treatment of cancerCurrent Clinical Pharmacology; 2012, 7 (4): 333-340

DNA methylation is a major epigenetic mechanism that leads to inhibition of gene transcription and is known to be involved in the pathogenesis of cancer. The effectors of DNA methylation are DNA methyltransferases (DNMTs) that catalyze either de novo or maintenance methylation of hemimethylated DNA after DNA replication. DNA methylationpatterns in cancer are distorted, with three ways by which DNA methylation contributes tocancer: hypomethylation of the cancer genome, focal hypermethylation of the promoters of tumour suppressor genes, and direct mutagenesis. Drugs that inhibit DNMTs are proving to be useful in the treatment of cancer with a few such drugs approved for clinical use. These drugs include nucleoside inhibitors, non-nucleoside inhibitors, oligonucleotides, and noncoding RNAs that target messenger RNAs of genes encoding DNMTs. The major value of DNMT inhibitors could be that at low doses they can induce the re-expression of aberrantly silenced tumour suppressor genes, allowing cancer cells to revert to a normal phenotype and/or reacquire cellular pathways needed for cell cycle regulation and apoptosis induction. They could also be useful in combination with other anticancer drugs. © 2012 Bentham Science Publishers.

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Intl PMID:22794162 MISC

Peedicayil, J.

Role of epigenetics in pharmacotherapy, psychotherapy and nutritional management of mental disordersJournal of Clinical Pharmacy and Therapeutics; 2012, 37 (5): 499-501

What is known and Objective: There is increasing evidence that epigenetics plays a major role in the pathogenesis of the idiopathic mental disorders. This article comments on the role of epigenetics in the pharmacotherapy, psychotherapy and nutritional management ofthese disorders. Comment: There are two classes of epigenetic drugs undergoing trials fortreating the idiopathic mental disorders: DNA methyltransferase and histone deacetylase inhibitors. These drugs may fulfil the need for newer and more effective drugs for treating these disorders. Psychotherapy could exert its therapeutic effect in idiopathic mental disorders through epigenetic mechanisms. As nutrients like folic acid and vitamin

B 12 can influence an individual's epigenome, especially early in life, abnormal intakes of such agents may be involved in the pathogenesis of the idiopathic mental disorders. Hence, adequate emphasis should be given to such factors in an individual's nutrition, especially early in life. Nutrients such as L-methylfolate and S-adenosylmethionine may also be useful in nutritional therapy of these disorders. What is new and Conclusion: Epigenetics plays a key role in the pathogenesis of the idiopathic mental disorders. Due emphasis should be given to epigenetic mechanisms in the pharmacotherapy, psychotherapy and nutritionalmanagement of these disorders. © 2012 Blackwell Publishing Ltd.

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Intl PMID:22449320 MISC

Peedicayil, J. and Kumar, A.

Time for clinical trials of epigenetic drugs in psychiatric disorders? British Journal of Clinical Pharmacology; 2012, 73 (2): 309-310

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Intl PMID: 22023150 MISC

Raghunath, R. and Perakath, B.

Colorectal cancer: Do we now have a definitive screening tool? National Medical Journal of India; 2012, 25 (4): 224-225

Address: Department of Surgery, General and Colorectal Surgery, Christian MedicalCollege, Vellore, Tamil Nadu, India

Nat PMID:23278782 MISC

Rajshekhar, V.

Endoscopic management of trapped fourth ventricle using the posterior fossa routeNeurology India; 2012, 60 (3): 269-270

Address: Department of Neurological Sciences, Christian Medical College, Vellore, Tamilnadu, India

Nat PMID:22824681 MISC

Rajshekhar, V.

Comparative study of two laminoplasty techniques: A missed opportunityNeurology India; 2012, 60 (2): 198-199

Address: Department of Neurological Sciences, Christian Medical College, Vellore-632 004, India

Nat PMID:22626703 MISC

Ramakrishna, B. S.

The Indian Journal of Gastroenterology: Looking ahead at the next five years Indian Journal of Gastroenterology; 2012, 31 (3): 102

Address: Department of Medical Gastroenterology, Christian Medical College, Vellore, 632004, India

Nat PMID:22798181 MISC

Ramakrishna, B. S., Makharia, G. K., Abraham, P., Ghoshal, U. C., Jayanthi, V., Agarwal, B. K., Ahuja, V., Bhasin, D. K., Bhatia, S. J., Choudhuri, G., Dadhich, S., Desai, D. C., Dhali,G. K., Goswami, B. D., Issar, S. K., Jain, A. K., Kochhar, R., Kumar, A., Loganathan, G., Misra, S. P., Pai, C. G., Pal, S., Pulimood, A., Puri, A. S., Ramesh, G. N., Ray, G., Singh, S.P., Sood, A. and Tandan, M.

Indian Society of Gastroenterology consensus on ulcerative colitisIndian Journal of Gastroenterology; 2012, 31 (6): 307-323

In 2010, the Indian Society of Gastroenterology's Task Force on Inflammatory Bowel Diseases undertook an exercise to produce consensus statements on ulcerative colitis. This consensus, produced through a modified Delphi process, reflects our current understandingof the definition, diagnostic work up, treatment and complications of ulcerative colitis. Theconsensus statements are intended to serve as a reference point for teaching, clinical practice, and research in India. © 2012 Indian Society of Gastroenterology.

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Mumbai, IndiaS N Medical College, Jodhpur, IndiaInstitute of Post Graduate Medical Education and Research, Kolkata, IndiaGuwahati Medical College, Guwahati, IndiaBhilai Steel Plant Hospital, Bhilai, IndiaChoithram Hospital and Research Centre, Indore, IndiaIndraprastha Apollo Hospital, New Delhi, IndiaG L Hospital, Salem, IndiaMoti Lal Nehru Medical College, Allahabad, IndiaKasturba Medical College, Manipal, IndiaG B Pant Hospital, Delhi, IndiaPVS Memorial Hospital, Kochi, IndiaB R Singh Hospital Eastern Railway, Kolkata, IndiaS C B Medical College, Cuttack, IndiaDayanand Medical College and Hospital, Ludhiana, India, Asian Institute of Gastroenterology, Hyderabad, India

Intl PMID:23096266 MISC

Ramamurthy, M., Kannangai, R., Abraham, A. M. and Sridharan, G

Viral infections in immunocompromised hosts Proceedings of the National Academy of Sciences India Section B - Biological Sciences;2012, 82 (1 MAJOR HUMAN VIRAL): 95-109

Several viral infections have been shown to occur in immunocompromised hosts like tumour bearing hosts, transplant recipients and human immunodeficiency virus (HIV) infected individuals. In these categories of patients they cause severe morbidity and disseminated fatal infections if untreated. The viruses that are significantly associated with disease in immunocompromised hosts are the members of family Herpesviridae, others include Adenoviruses (Adenoviridae), JC virus and BK virus family (Papovaviridae) and certain members of Paramyxoviridae like Respiratory Syncitial Virus, metapneumovirus and parainfluenza viruses. Infections could be seen in individuals when their HIV disease is asymptomatic and more fatal infections are seen when HIV disease is symptomatic. Infections with Hepatitis A virus and Hepatitis E virus could be seen as community acquired infections among immunosuppressed patients. Early and specific detection of opportunistic viruses is possible today by using certain new techniques like real-time multiplexpolymerase chain reaction. It is possible to intervene with antivirals which reduce morbidity and mortality if the diagnosis is achieved early in the course of disease. © The NationalAcademy of Sciences, India 2012.

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Nat MISC

Raychaudhury, T., George, R., Mandal, K., Srivastava, V. M., Thomas, M., Bornholdt, D., Grzeschik, K. H. and Koehler, A.

A Novel X-Chromosomal Microdeletion Encompassing Congenital Hemidysplasia withIchthyosiform Erythroderma and Limb Defects Pediatr Dermatol. 2013 Mar;30(2):250-2. doi: 10.1111/j.1525-1470.2012.01729.x. Epub2012 Apr 4.

We report an unusual phenotype of congenital hemidysplasia with ichthyosiform erythroderma and limb defects syndrome most likely resulting from a novel X-chromosomal microdeletion encompassing the promoter region and exon 1 of the nicotinamide adenine dinucleotide phosphate steroid dehydrogenase-like protein gene, the neighboring gene CETN2, and more than 10kb of noncoding deoxyribonucleic acid. © 2012 Wiley Periodicals, Inc.

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Intl PMID:22471832 MISC

Rempel, G. R., Blythe, C., Rogers, L. G. and Ravindran, V.

The Process of Family Management When a Baby Is Diagnosed With a Lethal CongenitalConditionJournal of Family Nursing; 2012, 18 (1): 35-64

The Family Management Style Framework (FMSF) was used as a conceptual basis for secondary data analysis of 55 previously conducted interviews with mothers and fathers of children with a lethal congenital condition from two surgical treatment eras. The directed content analysis was guided by a coding structure developed from family management

dimensions identified in prior research of family response to childhood chronic conditions. Results indicated that application of the FMSF was helpful in differentiating families and their processes of family management at the onset of their infant's illness through tosurviving the first surgery and going home. The dimensions of Illness View and ChildIdentity were central to the parents' capacity to manage their baby's illness demands within their family context. Applying a robust family framework to a complex neonatal condition at illness onset provides compelling direction for clinical interventions and their rigorous evaluation.

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Intl PMID:22223497 MISC

Sathyanarayana Rao, T. S. and Jacob, K. S.

Homosexuality and India Indian Journal of Psychiatry; 2012, 54 (1): 1-3

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Nat PMID:22556428 MISC

Sathyanarayana Rao, T. S., Gopalakrishnan, R., Kuruvilla, A. and Jacob, K. S.

Social determinants of sexual healthIndian Journal of Psychiatry; 2012, 54 (2): 105-107

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Nat PMID:22988315 MISC

Simha, A., Irodi, A. and David, S.

Magnetic resonance imaging for the ophthalmologist: A primerIndian Journal of Ophthalmology; 2012, 60 (4): 301-310

Magnetic resonance imaging (MRI) and computerized tomography (CT) have added a new dimension in the diagnosis and management of ocular and orbital diseases. Although CT ismore widely used, MRI is the modality of choice in select conditions and can becomplimentary to CT in certain situations. The diagnostic yield is best when the ophthalmologist and radiologist work together. Ophthalmologists should be able to interpret these complex imaging modalities as better clinical correlation is then possible. In this article, we attempt to describe the basic principles of MRI and its interpretation, avoiding confusing technical terms.

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Nat PMID:22824600 MISC

Sonbare, D.

Image-enhanced laparosocopy: Would it change staging and management protocols in surgical oncology?Surgery (United States); 2012, 152 (5): 939-940

Address: Department of HPB Surgery, Men's Interns Quarters, Christian Medical College and Hospital, Vellore, Tamil Nadu, India

Intl PMID: 22902200 MISC

Sonbare, D.

Bile leakage after hepatobiliary and pancreatic surgery: Is the ISGLS definition too simple? Surgery; 2012, 151 (4): 634

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Intl PMID:22257831 MISC

Sreekar, H., Dawre, S., Lamba, S. and Gupta, A. K.

Trend of India's contribution to the field of plastic and reconstructive surgery Annals of Plastic Surgery; 2012, 69 (2): 223

Address: Department of Plastic and Reconstructive Surgery, Christian Medical College, Vellore, India

Intl PMID:22772069 MISC

Tamilarasi, V.

Approach to management of pediatric stone diseaseIndian Journal of Practical Pediatrics; 2012, 14 (2): 199-206

Renal stone disease among children is usually associated with biochemical abnormalities and need evaluation/or detecting the cause. Renal dysfunction is also common. Calciumcontaining stones are CO

Nat MISC

Tharyan, P.

Criminals in the citadel and deceit all along the watchtower: Irresponsibility, fraud, and complicity in the search for scientific truthMens Sana Monographs; 2012, 10 (1): 158-180

Scientific research aims to use reliable methods to produce generalizable new knowledge in order to understand the human condition and maximize human potential. The sanctityaccorded to scientific research has been violated by numerous instances of research fraud,as well as deceptive and conflicted research that have seriously harmed people, subverted the evidence-base, wasted valuable resources, and undermined public trust. This deception by individuals has been fostered by the unrealistic expectations of society; facilitated by the complicity of institutions and organisations; and sanctioned by the inaction of supposedgate-keepers. Re-defining misconduct as occurring on a continuum from irresponsible to fraudulent is the first step in confronting this inconvenient truth. Implementing and evaluating multiple strategies targeting systems and individuals that promote the responsible conduct of research, rather than merely exposing serious instances of misconduct by individuals, is urgently required to restore faith in the aspirations, integrity, and results of scientific research.

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Nat PMID:22654391 MISC

Thomas, B. P. and Sreekanth, R.

Distal radioulnar joint injuriesIndian Journal of Orthopaedics; 2012, 46 (5): 493-504

Distal radioulnar joint is a trochoid joint relatively new in evolution. Along with proximal radioulnar joint , forearm bones and interosseous membrane, it allows pronosupination andload transmission across the wrist. Injuries around distal radioulnar joint are notuncommon, and are usually associated with distal radius fractures,fractures of the ulnar styloid and with the eponymous Galeazzi or Essex-Lopresti fractures. The injury can be purely involving the soft tissue especially the triangular fibrocartilage or the radioulnar ligaments.The patients usually present with ulnar sided wrist pain, features of instability, or restriction of rotation. Difficulty in carrying loads in the hand is a major constraint for these patients. Thorough clinical examination to localize point of tenderness and appropriate provocative tests help in diagnosis. Radiology and MRI are extremely useful, while arthroscopy is the gold standard for evaluation. The treatment protocols are continuously evolving and range from conservative, arthroscopic to open surgical methods. Isolated dislocation are uncommon. Basal fractures of the ulnar styloid tend to make the joint unstable and may require operative intervention. Chronic instability requires reconstruction of the stabilizing ligaments to avoid onset of arthritis. Prosthetic replacement in arthritis is gaining acceptance in the management of arthritis.

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Nat PMID: 23162140 MISC

Thomas, N., Santhanam, S., Kumar, M., Kuruvilla, K. A. and Jana, A. K.

Hypothermia for neonatal encephalopathy in resource-poor environmentsJournal of Pediatrics; 2012, 160 (4): 709

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Intl PMID:22284566 MISC

Thomas. R.

Commentary, Journal of Neurosciences in Rural Practice; 2012, 3 (1): 16

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Nat PMID:22346184 MISC

Thomas, V. and Jose, R.

Nemaline myopathy and pregnancy: A challenge indeedNeurology India; 2012, 60 (5): 524-525

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Nat PMID:23135035 MISC

Varghese, J., Faith, M. and Jacob, M.

Impact of e-resources on learning in biochemistry: First-year medical students perceptionsBMC Med Educ. 2012 May 16;12:21. doi: 10.1186/1472-6920-12-21.

Background: E-learning resources (e-resources) have been widely used to facilitate self- directed learning among medical students. The Department of Biochemistry at Christian Medical College (CMC), Vellore, India, has made available e-resources to first-year medicalstudents to supplement conventional lecture-based teaching in the subject. This study wasdesigned to assess students perceptions of the impact of these e-resources on various aspects of their learning in biochemistry.

Methods: Sixty first-year medical students were the subjects of this study. At the end of the one-year course in biochemistry, the students were administered a questionnaire that asked them to assess the impact of the e-resources on various aspects of their learning in biochemistry. Results: Ninety-eight percent of students had used the e-resources provided to varying extents. Most of them found the e- resources provided useful and of a high quality. The majority of them used these resources to prepare for periodic formative and final summative assessments in the course. The useof these resources increased steadily as the academic year progressed. Students said that the extent to which they understood the subject (83%) and their ability to answerquestions in assessments (86%) had improved as a result of using these resources. Theyalso said that they found biochemistry interesting (73%) and felt motivated to study the subject (59%). Conclusions: We found that first-year medical students extensively used the e-resources in biochemistry that were provided. They perceived that these resources had made a positive impact on various aspects of their learning in biochemistry. We conclude that e-resources are a useful supplement to conventional lecture-based teaching in the medical curriculum. © 2012 Nkenke et al; licensee BioMed Central Ltd.

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Intl PMID:22510159 MISC

Varughese, S., Sundaram, M., Basu, G., David, V. G., Mohapatra, A., Alexander, S. and Tamilarasi, V.

Percutaneous PD catheter insertion after past abdominal surgeriesIndian Journal of Nephrology; 2012, 22 (3): 230-231

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Nat PMID: 23087566 MISC

Vyas, F. and Perakath, B.

Intestinal failure: A viable proposition in IndiaIndian Journal of Gastroenterology; 2012, 31 (4): 163-164

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Nat PMID: 22956333 MISC

Vyas, R., Zachariah, A., Swamidasan, I., Doris, P. and Harris, I.

A networking approach to reduce academic and social isolation for junior doctors working in rural hospitals in IndiaEducation for Health: Change in Learning and Practice; 2012, 25 (1): 70-74

Introduction: Graduates from Christian Medical College (CMC) Vellore face many challenges while doing their service obligation in smaller hospitals, including academic and social isolation. To overcome these challenges, CMC aspired through its Fellowship in Secondary Hospital Medicine (FSHM), a 1-year blended on-site and distance-learning program, to provide academic and social support through networking for junior doctors working in rural areas. The purpose of this paper is to report the evaluation of the networking components of the FSHM program, with a focus on whether it succeeded in providing academic and social support for these junior doctors. Methods: A mixed method evaluation was done using written surveys for students and faculty and telephone

interviews for students. Evidence for validity was gathered for the written survey. Criteria for validity were also applied for the qualitative data analysis. Results: The major strengths of networking with faculty and peers identified were that it provided social support, academic support through discussion about patient management problems and a variety of cases seen in the hospital, guidance on projects and reminders about deadlines. Recommendations for improvement included use of videoconferencing and Yahoo Groups. Conclusion: It is useful to incorporate networking into distance-learning educational programs for providing support to junior doctors working in rural hospitals.

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Intl MISC

Zachariah, J. R., Rao, A. L., Prabha, R., Gupta, A. K., Paul, M. K. and Lamba, S.

Post burn pruritus - A review of current treatment optionsBurns; 2012, 38 (5): 621-629

Post burn pruritus is a well recognised symptom in almost all burn patients. Yet, there is insufficient awareness about the etiopathogenesis and a lack of a systematic approach inthe assessment and treatment of this distressing symptom. The current standard therapiesinclude antihistamines, which are effective as sole therapy in only 20% patients, and emollients. There is a lacunae of clear consensus on the care of patients not responding to antihistamines. We review the literature on the etiology and pathogenesis of post burn pruritus, which has both central and peripheral pathways. The published studies on the currently available therapeutic options to treat itch in burns are discussed. On the basis of current evidence in literature, gabapentin used in the treatment of neuropathic pain, has demonstrated great promise, and is suggested as the next option for this subset of patients, not relieved with antihistamines.

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Intl PMID:22244605 MISC

Anuradha, C., Shyamkumar, N. K., Vinu, M., Surendra Babu, N. R. S. and Christopher, D. J.

Outcomes of bronchial artery embolization for life-threatening hemoptysis due totuberculosis and post-tuberculosis sequelae Diagn Interv Radiol. 2012 Jan-Feb;18(1):96-101. doi: 10.4261/1305-3825.DIR.3876-11.2. Epub 2011 Jun 15.

PURPOSE: To determine the long-term outcomes of bronchial artery embolization in patients with massive hemoptysis due to pulmonary tuberculosis and post-tuberculosissequelae and to study the factors influencing success.

MATERIALS AND METHODS: In this study, 58 patients underwent 64 bronchial artery embolizations for massive hemoptysis dueto tuberculosis or its sequelae between 1998 and 2008. Their images and procedure details were reviewed. Medical records and direct contact were used to obtain information onoutcome. The cumulative hemoptysis control rate per follow-up interval was calculated. RESULTS: The data showed that 25 patients presented with acute massive hemoptysis and33 presented with chronic recurrent hemoptysis. The median quantity of blood was 400 mL (range, 70-2000 mL). The median follow-up period was 432 days (range, 11-1789 days).Twenty-seven patients had recurrence after a median period of 110 days after theprocedure (range, 1-959 days). The hemoptysis control rate was 93% at 2 weeks, 86% at one month, 79.5% at 3 months, 63% at 6 months, 51% at one year and 39% at 2 years. Six patients underwent repeat procedures. Chest pain was the most common procedure- related complication (n=20, 34.5%); there was no spinal cord complication or mortality.There were seven deaths, five of which were related to hemoptysis. Nine patients were lostto follow-up. Lung cavities (P = 0.08), nonbronchial systemic artery collaterals (P = 0.081) and systemicto-pulmonary venous shunts (P = 0.053) were more common in those who experienced recurrence.

CONCLUSION: Bronchial artery embolization is a relatively safe procedure that is lifesaving in patients who are not suitable for surgery. However, the associated long-term outcome is less satisfactory. © Turkish Society of Radiology 2012.

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Intl PMID:21678246 CI

Arockiaraj, J., Balaji, G., Ashok, A. and Kokil, G.

Amphotericin B cement beads: A good adjunctive treatment for musculoskeletal mucormycosisIndian Journal of Orthopaedics; 2012, 46 (3): 369-372

Mucormycosis is one among the aggressive, invasive fungal infections usually seen in immunocompromised patients. Mucormycosis osteomyelitis is very rare. We present a patient with acute myeloid leukemia who complained of pain over the right proximal thigh. Plain radiograph revealed ill defined osteolytic lesion of proximal femur. MRI showed altered signal in proximal femur with focal collection and cortical breach. Biopsy and tissue culture diagnosed mucormycosis both histologically and microbiologically. He was treated with aggressive debridement, skeletal stabilization, and amphotericin antifungal cement beads. He recovered with no residual pain, minimal limb shortening, and no clinical or radiological evidence of recurrence at 3 years followup. The high index of suspicion, early diagnosis, aggressive surgical debridement, and adequate antifungal therapy play a significant role in the treatment of musculoskeletal mucormycosis.

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Nat PMID:22719129 CI

Darngawn, L., Jose, R., Regi, A., Bansal, R. and Jeyaseelan, L.

A shortened postpartum magnesium sulfate prophylaxis regime in pre-eclamptic women at low risk of eclampsiaInternational Journal of Gynecology and Obstetrics; 2012, 116 (3): 237-239

Objective: To determine whether magnesium sulfate (MgSO 4) prophylaxis is needed for up to 24 hours postpartum in all patients with pre-eclampsia. Methods: In a randomized openclinical trial conducted in a tertiary health center in India between September 2008 andApril 2010, 150 women with severe pre-eclampsia who received intrapartum MgSO 4 and delivered at more than 20 weeks gestation were enrolled. After 6 hours postpartum, the participants were randomized to continue receiving (control group) or to discontinue (intervention group) MgSO 4, and outcomes were compared. Results: Administration of MgSO 4 had to be reinstituted for 1 woman in the intervention group. Under the current protocol in the institution, all 75 women in the intervention group would have received MgSO 4 for 24 hours postpartum. A significant reduction in time spent by the doctors (P< 0.001) and nurses (P < 0.001) was seen in the intervention group. The pain score in the intervention group was significantly less (P < 0.001), and women in the intervention group were able to look after themselves better (P < 0.001). Conclusion: For women at low risk for postpartum eclampsia, a shortened (6-hour) MgSO 4 regime was as effective for seizure prophylaxis as the conventional 24-hour regime, with significant benefits interms of cost and morbidity. © 2011 International Federation of Gynecology and Obstetrics.

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Intl PMID:22261127 CI

Julka, P. K., Chacko, R. T., Nag, S., Parshad, R., Nair, A., Koppiker, C. B., Xue, F. C. R., Barraclough, H., Dhindsa, N., Seth, A., Majumdar, A. and Puri, T.

A phase 2 study of sequential neoadjuvant chemotherapy with gemcitabine and doxorubicin followed by gemcitabine and cisplatin in patients with large or locally advanced operablebreast cancer: results from long-term follow-up Breast Cancer. 2012 Feb 22. [Epub ahead of print]

Background: Neoadjuvant chemotherapy (NACT) is being increasingly used for patients with large-size operable breast cancer. This phase 2 study of sequential NACT with gemcitabine and doxorubicin (Gem + Dox) followed by gemcitabine and cisplatin (Gem + Cis) was conducted in women with large or locally advanced breast cancer. The objectives were to evaluate the pathological complete response (pCR) rate, toxicity, pathological and genetic markers

predicting response, the proportion of patients undergoing breast conservation surgery, progression-free survival (PFS) and overall survival (OS) after 5 years, and time to treatment failure (TtTF). In this manuscript, we report the long-term OS, PFS, and TtTF results. Methods: Female patients aged at least 18 years with large T2 (at least 3 cm) or locally advanced (T3, T4, or N2) breast carcinoma were included. Treatment consisted of 4 cycles of Gem + Dox (gemcitabine 1,200 mg/m 2 on days 1 and 8 plus doxorubicin60 mg/m 2 on day 1 of each 21-day cycle), followed by 4 cycles of Gem + Cis (gemcitabine1,000 mg/m 2 on days 1 and 8 plus cisplatin 70 mg/m 2 on day 1 of each 21-day cycle), and then surgery. Results: Sixty-five patients were enrolled. The pCR rate was 20%. The 5- year OS probability was 71% (95% CI 56-82%), and the 4-year PFS and TtTF probabilitieswere 63% (95% CI 48-74%) and 45% (95% CI 32-57%), respectively. Conclusions: NACTwith Gem + Dox followed by Gem + Cis was efficacious in patients with operable breast cancer. © 2012 The Japanese Breast Cancer Society.

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Intl PMID:22354450 CI

Kavitha, A., Chacko, K. P., Thomas, E., Rathore, S., Christoper, S., Biswas, B. and Mathews, J. E.

A randomized controlled trial to study the effect of IV hydration on the duration of labor in nulliparous womenArchives of Gynecology and Obstetrics; 2012, 285 (2): 343-346

Purpose To compare the effects of two different regimens of intravenous hydration and oral hydration on the duration of active labor. Methods Two hundred and ninety-three low risk term primigravida in active labor were randomized into three groups. The first group had 99 patients who received oral fluids only, the second group of 98 patients received intravenous Ringer lactate at the rate of 125 ml/h (IV 125 ml) and the third group had 96 patients who received intravenous Ringer lactate at a rate of 250 ml/h (IV 250 ml). Amniotomy and oxytocin administration were allowed according to the physician's discretion. Results The mean duration of labor in the oral fluid group was 391, 363 min in the 125 ml/h group and343 min in the 250 ml/h group, P = 0.203. The incidence of prolonged labor more than 12 h in the oral fluid group was 7.1% in the oral fluid group, 4.1% in the 125 ml/h group and3.1% in the 250 ml/h group, P = 0.402. The oxytocin requirement was 37% in the oralgroup, 32% in the 125 ml/h group and 33% in the 250 ml/h group, P = 0.68. There was a statistically significant reduction in the incidence of vomiting in patients receiving intravenous hydration, i.e. 24.2% in the oral group, 11.2% in the 125 ml/h group and 6.3% in the 250 ml/h group, P = 0.001. There was no difference in the mode of delivery,maternal or neonatal complications between the three groups. Conclusion This study establishes a trend towards decreased incidence of prolonged labor and less vomiting in patients receiving intravenous hydration. © 2011 Springer-Verlag.

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Intl PMID:21748313 CI

Lalwani, S., Chatterjee, S., Chhatwal, J., Verghese, V. P., Mehta, S., Shafi, F., Borys, D., Moreira, M. and Schuerman, L.

Immunogenicity, safety, and reactogenicity of the 10-valent pneumococcal non-typeableHemophilus influenzae protein D conjugate vaccine (PHiD-CV) when co-administered with the DTPw-HBV/Hib vaccine in Indian infants: A single-blind, randomized, controlled studyHuman Vaccines and Immunotherapeutics; 2012, 8 (5): 612-622

In India, pneumococcal diseases are major causes of child mortality, and effective vaccines against Streptococcus pneumoniae are needed. This single-blind, randomized study assessed the immunogenicity, reactogenicity, and safety of the 10-valent pneumococcal non-typeable Hemophilus influenzae (NTHi) protein D conjugate vaccine (PHiD-CV) co-administered with DTPw-HBV/Hib in Indian infants as 3-dose primary vaccination course. Atotal of 360 infants were randomized (2:1) to receive either PHiD-CV co-administered with DTPw-HBV/Hib (PHiD-CV group) or a Hib vaccine co-administered with DTPw-HBV (control group) at 6, 10, and 14 weeks of age. For each vaccine pneumococcal serotype, the percentage of infants in the PHiD-CV group with antibody concentrations e" 0.2 µg/mL one month after the third vaccine dose was at least 98.3%, except for serotypes 6B (77.7%) and 23F (89.5%), and opsonophagocytic activity titers e" 8 were measured in at least95.7% of infants, except for serotypes 1 (90.5%) and 6B (84.5%). In addition, all the infants in the PHiD-CV group were seroprotected against diphtheria, tetanus, Hib, and hepatitis B or seropositive for antibodies against pertussis and NTHi protein D (except one infant). Incidences of solicited local and general symptoms were comparable between groups, except for fever (axillary temperature e" 37.5°C), which seemed to occur more frequently in the PHiDCV group. In conclusion, PHiD-CV was shown to be immunogenic and well-tolerated when co-administered with DTPw-HBV/Hib in Indian infants.

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Intl PMID:22634448 CI

Lamba, S., Keshava, S. K. N., Moses, V., Surendrababu, N. and Gupta, A. K.

Ethanol sclerotherapy for treatment of venous malformations of face and neck- A single centre experienceEuropean Journal of Plastic Surgery; 2012, 35 (5): 345-350

Due to complicated anatomy of the face and neck, complete surgical excision of venous malformation is rarely possible and may lead to bleeding, nerve damage and cosmetic deformity. Sclerotherapy is an alternative method of treatment with few complications. Ethanol shows the lowest rate of malformation recurrence and is the most reliable substance of all of the sclerosing agents. This study aims to evaluate the efficacy of ethanol instillation in venous malformation of the face and neck. Between July 20, 2008, toDecember 30, 2009, 15 patients with venous malformation of the face and neck wereincluded in the study. After confirmation of diagnosis (combination of history, physical findings and magnetic resonance imaging), percutaneous ethanol (99.5% ethyl alcohol) sclerotherapy was used under DSA road mapping using general anaesthesia. Sclerotherapy provided significant improvement of symptoms for all patients, with no major complications. All patients experienced pain and swelling to a variable degree in the immediate post procedure period that resolved over few days. Ethanol sclerotherapy for venous malformations of the face and neck is a safe and effective treatment option. © 2012Springer-Verlag.

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Intl CI

Mundle, S., Regi, A., Easterling, T., Biswas, B., Bracken, H., Khedekar, V., RatnaShekhavat, D., Durocher, J. and Winikoff, B.

Treatment approaches for preeclampsia in low-resource settings: A randomized trial of theSpringfusor pump for delivery of magnesium sulfatePregnancy Hypertension; 2012, 2 (1): 32-38

Objective: To test the safety, efficacy, and acceptability of a simple, mechanically flow- controlled pump (Springfusor®) for the delivery of magnesium sulfate for the treatment of preeclampsia. Design: Eligible women (n = 300) had blood pressure e"140/100 mm Hg, andproteinuria e"1+ (30 mgdL); the clinic team determined that they were likely to benefit

frommagnesium sulfate. Women were randomized to 24 h of magnesium sulfate by either IV administered by the Springfusor® pump (n = 147) or standard hospital practice - IV loading dose administered manually followed by maintenance therapy using an IM route of administration (n = 153). Main outcome measures: Our primary outcome of interest was the safety and efficacy of the Springfusor pump including the side and adverse effects experienced during drug administration. Data on side effects, patient acceptability, delivery complications, and maternal and neonatal outcomes were collected. Results: Fewer women stopped treatment due to side effects, toxicity, oliguria or renal failure, or women's request in the Springfusor arm (4% or 6 of 147 women) compared to the Standard of Care arm (6.5% or 10 of 153 women). Women in the Springfusor arm reported significantly less nausea, headache, and pain than women in the Standard of Care arm. Almost all women (97%) in the Springfusor arm reported their pain level as 'acceptable' or 'very acceptable' compared to only 30% of women given the Standard of Care. Conclusion: The Springfusor pump may offer an alternative to intramuscular administration of magnesium sulfate where electronic pumps are not available. © 2011 International Society for the Study of Hypertension in Pregnancy. Published by Elsevier B.V. All rights reserved.

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Intl CI

Nosov, D. A., Esteves, B., Lipatov, O. N., Lyulko, A. A., Anischenko, A. A., Chacko, R. T., Doval, D. C., Strahs, A., Slichenmyer, W. J. and Bhargava, P.

Antitumor activity and safety of tivozanib (AV-951) in a phase II randomizeddiscontinuation trial in patients with renal cell carcinomaJ Clin Oncol. 2012 May 10;30(14):1678-85. doi: 10.1200/JCO.2011.35.3524. Epub 2012Apr 9.

Purpose: The antitumor activity and safety of tivozanib, which is a potent and selective vascular endothelial growth factor receptor-1, -2, and -3 inhibitor, was assessed in patients with advanced/metastatic renal cell carcinoma (RCC). Patients and Methods: In this phaseII, randomized discontinuation trial, 272 patients received open-label tivozanib 1.5 mg/d (one cycle equaled three treatment weeks followed by a 1-week break) orally for 16 weeks. Thereafter, 78 patients who demonstrated e" 25% tumor shrinkage continued to take tivozanib, and 118 patients with less than 25% tumor change were randomly assigned to receive tivozanib or a placebo in a double-blind manner; patients with e" 25% tumor growth were discontinued. Primary end points included safety, the objective response rate (ORR) at16 weeks, and the percentage of randomly assigned patients who remained progression free after 12 weeks of double-blind treatment; secondary end points included progression-free survival (PFS). Results: Of 272 patients enrolled onto the study, 83% of patients had clear-cell histology, 73% of patients had undergone nephrectomy, and 54% of patients were treatment naive. The ORR after 16 weeks of tivozanib treatment was 18% (95% CI,14% to 23%). Of the 118 randomized patients, significantly more patients who were randomly assigned to receive double-blind tivozanib remained progression free after 12 weeks versus patients who received the placebo (49% v 21%; P = .001). Throughout the study, the ORR was 24% (95% CI, 19% to 30%), and the median PFS was 11.7 months (95% CI, 8.3 to 14.3 months) in the overall study population. The most common grade 3 and 4 treatment-related adverse event was hypertension (12%). Conclusion: Tivozanib was active and well tolerated in patients with advanced RCC. These data support additional development of tivozanib in advanced RCC. © 2012 by American Society of Clinical Oncology.

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Intl PMID:22493422 CI

Teoh, G., Chen, Y., Kim, K., Srivastava, A., Pai, V. R., Yoon, S. S., Suh, C. and Kim, Y. K. Lower dose

dexamethasone/thalidomide and zoledronic acid every 3 weeks in previouslyuntreated multiple myeloma Clinical Lymphoma, Myeloma and Leukemia; 2012, 12 (2): 118-126

Background: Physicians in Asia have anecdotally reported that Asian patients with multiple myeloma (MM) are frequently intolerant of conventional doses of dexamethasone (Dex)and/or thalidomide (Thal). Since zoledronic acid (Zol) has an anti-MM effect in preclinicalstudies, we investigated whether the approved 3-times-weekly Zol combined with lower dose Dex/Thal could be an effective and better tolerated regimen in Asian patients. Patients and Methods: In this first Asian cooperative multicenter phase II study, previouslyuntreated patients with MM (N = 44) received up to 6 cycles of 3-times-weekly low-dose Dex/Thal and 4 mg Zol (the dtZ regimen). Response was graded using Bladé criteria. Results: The average doses of Dex and Thal administered were 185.2 mg/month; and 87.5 mg/day, respectively. Thirty-nine (88.6%) patients demonstrated at least a partial response (PR), including 18.2% very good partial response (VGPR), 15.9% near complete response (nCR) and 18.2% complete response (CR). Achievement of CR/nCR was related tosignificant (P < .05), rapid, and sustained inhibition of osteoclasts (OCs) and OC precursors(pOCs) by Zol. Sepsis was the most frequently reported serious toxicity, contributing to 3 of4 deaths. Importantly, there was no peripheral neuropathy, osteonecrosis of the jaw, or nephrotoxicity. Conclusion: We conclude that the dtZ regimen is an effective and well-tolerated regimen for Asian patients with newly diagnosed MM. The high rate ofVGPR/nCR/CR suggests that Zol could have a clinically relevant anti-MM effect. Since infections are the most frequent adverse event, it is probably wise to further lower the dose of Dex in future studies.

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Intl PMID:22206804 CI

Tharion, E., Samuel, P., Rajalakshmi, R., Gnanasenthil, G. and Subramanian, R. K.

Influence of deep breathing exercise on spontaneous respiratory rate and heart ratevariability: A randomised controlled trial in healthy subjectsIndian Journal of Physiology and Pharmacology; 2012, 56 (1): 80-87

Studies show that yogic type of breathing exercises reduces the spontaneous respiratory rate. However, there are no conclusive studies on the effects of breathing exercise on heart rate variability. We investigated the effects of non-yogic breathing exercise on respiratory rate and heart rate variability. Healthy subjects (21-33 years, both genders) were randomized into the intervention group (n=18), which performed daily deep breathing exercise at 6 breaths/min (0.1 Hz) for one month, and a control group (n=18) which didnot perform any breathing exercise. Baseline respiratory rate and short-term heart rate variability indices were assessed in both groups. Reassessment was done after one monthand the change in the parameters from baseline was computed for each group. Comparisonof the absolute changes [median (inter-quartile ranges)] of the parameters between the intervention and control group showed a significant difference in the spontaneous respiratory rate [intervention group -2.50 (-4.00, -1.00), control group 0.00 (-1.00, 1.00),cycles/min, P<0.001], mean arterial pressure [intervention group -0.67 (-6.67, 1.33),control group 0.67 (0.00, 6.67), mmHg, (P<0.05)], high frequency power [intervention group 278.50 (17.00, 496.00), control group -1.00 (-341.00, 196.00), ms 2, P<0.05] and sum of low and high frequency powers [intervention group 512.00 (-73.00, 999.00), control group 51.00 (-449.00, 324.00), ms 2, P<0.05]. Neither the mean of the RR intervals nor the parameters reflecting sympatho-vagal balance were significantly different across the groups. In conclusion, the changes produced by simple deep slow breathing exercise in the respiratory rate and cardiac autonomic modulation of the intervention group weresignificant, when compared to the changes in the control group. Thus practice of deep slow breathing exercise improves heart rate variability in healthy subjects, without altering their cardiac autonomic balance. These

findings have implications in the use of deep breathing exercises to improve cardiac autonomic control in subjects known to have reduced heart rate variability.

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Nat PMID:23029969 CI

Thomas, N., Cherian, A., Santhanam, S. and Jana, A. K.

A randomized control trial comparing two enteral feeding volumes in very low birth weight babiesJournal of Tropical Pediatrics; 2012, 58 (1): 55-58

Poor post-natal growth of preterm neonates is common and fortification is recommended. However, this is not always practical in low-resource areas. Hypothesizing that increasingthe volume of feeds would be safe and lead to better post-natal weight gain, werandomized 64 babies with birth weight <1500 g, once they reached full feeds, to continue feeds at 200 ml/kg/day (standard volume) or increase to 300 ml/kg/day (high volume) of expressed breast milk. There was a significantly higher daily weight gain in the high-volume group as compared to the standard volume group (24.9 vs. 18.7 g/kg/day, p < 0.0001). There were no differences in complications like feed intolerance, tachypnoea, sepsis, patent ductus arteriosus or necrotizing enterocolitis. High-volume feeds at 300 ml/kg/day was safe and resulted in better weight gain than standard volume feeds in very low birth weight babies.

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Intl PMID:21320855 CI

Zachariah, J. R., Lakshmanarao, A., Prabha, R., Gupta, A. K., Paul, K. M. and Lamba, S.

A prospective study on the role of gabapentin in post-burn pruritusEuropean Journal of Plastic Surgery une 2012, Volume 35, Issue 6, pp 425-431

Gabapentin, used in the treatment of neuropathic pain, is suggested as an alternative treatment to antihistamines for post-burn itching. There is insufficient awareness about the etiopathogenesis and available treatment options for post-burn pruritus. To study the effect of gabapentin on post-burn itching, patients with post-burn pruritus not relieved with cetirizine tablet were offered gabapentin and assessed for response by the numerically graded self-report questionnaire 'Itch Severity Scale' for 6 months. Treatment success was determined by reduction in the itch scores, which were statistically analysed. Twenty-three patients with post-burns pruritic hypertrophic scars were studied. All patients had history of delayed burn healing (over 3 weeks). Twenty patients completed follow-up. All 20 reporteda reduction in itching with gabapentin. Mean reduction in itch severity was 4.99 (statistically significant) within the first month of starting the therapy, with sustained effect seen for the duration of treatment. No serious side effects were reported. Eighty-seven per cent of patients showed good relief from itching within 1 month of starting treatment. Overallquality of life improved considerably. Gabapentin is suggested as a protocol for second-line option in post-burn pruritus. The 'Itch Severity Scale' is a reliable tool for pruritus measurement, including subjective parameters.

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Nat CI

Dutta, A. K., Verghese, V. P., Pemde, H., Mathew, L. G. and Ortiz, E.

Immunogenicity and safety of a DTaP-IPV//PRP~T vaccine (Pentaxim) booster doseduring the second year of life in Indian children primed with the same vaccineIndian Pediatrics; 2012, 49 (10): 793-798

Objective: To evaluate the immunogenicity and safety of a pentavalent (diphtheria, tetanus, acellular pertussis, inactivated poliovirus, Hib polysaccharide-conjugate) combination vaccine booster dose. Design: Multicenter, open, Phase III clinical study. Setting: Two tertiary-care hospitals in Delhi and Vellore, India. Participants/patients:207 healthy Indian children. Intervention: The DTaP-IPV//PR~NT vaccine (Pentaxim)was given at 18-19 months of age to

children who had been primed with the same vaccine at 6,10,14 weeks of age. Main outcome measures: Immunogenicity was assessed before and 1 month after the booster. Safety was evaluated from parental reports, and investigator assessments. Results: At 18-19 months of age, beforeboosting, the SP rates against diphtheria, tetanus, poliovirus and PRP were 82.3-100%;90.0% of participants had anti-PRP e”0.15 µg/mL. Anti-poliovirus titers were e”1:8 dilution in 97.9-98.4% of participants. Anti-PT and FHA titers (e”5 EU/mL) were detectable in 82.5% and 90.8% of participants, respectively. One month after the booster dose, SP rates were 99.5% for PRP (e”1.0 µg/mL), 100% for diphtheria, tetanus (e”0.1 IU/mL) and polioviruses (e”8:1/dilution). Seroconversion (4 fold post-booster increase in anti-PT and -FHA concentration) occurred in 96.8% and 91.7%, respectively. Geometric mean concentrations (GMC) increased from 11.7 to 353.1 EU/mL and from18.2 to 363.4 EU/mL for anti-PT and anti-FHA, respectively. Anti-PRP GMC increased from 1.75 to 70.5 µg/ mL. Vaccine reactogenicity was low; severe solicited reactions were reported by <1.4% of participants. Conclusion: The DTaP-IPV//PRP-T vaccine booster at 18-19 months of age was well tolerated and induced strong antibody responses.

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Nat PMID:22791675 CI

Gulati, A., Sinha, A., Gupta, A., Kanitkar, M., Sreenivas, V., Sharma, J., Mantan, M., Agarwal, I., Dinda, A. K., Hari, P. and Bagga, A.

Treatment with tacrolimus and prednisolone is preferable to intravenous cyclophosphamide as the initial therapy for children with steroid-resistant nephrotic syndromeKidney International; 2012, 82 (10): 1130-1135

There are limited data on the relative efficacy and safety of calcineurin inhibitors and alkylating agents for idiopathic steroid-resistant nephrotic syndrome in children. To clarify this, we compared tacrolimus and intravenous cyclophosphamide therapy in a multicenter, randomized, controlled trial of 131 consecutive pediatric patients with minimal change disease, focal segmental glomerulosclerosis, or mesangioproliferative glomerulonephritis, stratified for initial or late steroid resistance. Patients were randomized to receive tacrolimus for 12 months or 6-monthly infusions of intravenous cyclophosphamide with both arms receiving equal amounts of alternate-day prednisolone. The primary outcome of complete or partial remission at 6 months, based on spot urine protein to creatinine ratios, was significantly higher in children receiving tacrolimus compared to cyclophosphamide (hazard ratio 2.64). Complete remission was significantly higher with tacrolimus (52.4%) than with cyclophosphamide (14.8%). The secondary outcome of sustained remission or steroid-sensitive relapse of nephrotic syndrome at 12 months was significantly higher with tacrolimus than cyclophosphamide. Treatment withdrawal was higher with cyclophosphamide, chiefly due to systemic infections. Compared to cyclophosphamide, 3 patients required treatment withtacrolimus to achieve 1 additional remission. Thus, tacrolimus and prednisolone are effective, safe, and preferable to cyclophosphamide as the initial therapy for patients with steroid-resistant nephrotic syndrome. © 2012 International Society of Nephrology.

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Intl PMID:22763815 CI

Lynch, T. J., Bondarenko, I., Luft, A., Serwatowski, P., Barlesi, F., Chacko, R., Sebastian, M., Neal, J., Lu, H., Cuillerot, J. M. and Reck, M.

Ipilimumab in combination with paclitaxel and carboplatin as first-line treatment in stage IIIB/IV non-small-cell lung cancer: Results from a randomized, double-blind,multicenter phase II studyJournal of Clinical Oncology; 2012, 30 (17): 2046-2054

Purpose: Ipilimumab, which is an anti-cytotoxic T-cell lymphocyte-4 monoclonal antibody, showed a survival benefit in melanoma with adverse events (AEs)

managed by protocol-defined guidelines. A phase II study in lung cancer assessed the activity of ipilimumab plus paclitaxel and carboplatin. Patients and Methods: Patients (N = 204)with chemotherapy-naive non-small-cell lung cancer (NSCLC) were randomly assigned1:1:1 to receive paclitaxel (175 mg/m 2) and carboplatin (area under the curve, 6) with either placebo (control) or ipilimumab in one of the following two regimens: concurrent ipilimumab (four doses of ipilimumab plus paclitaxel and carboplatin followed by two doses of placebo plus paclitaxel and carboplatin) or phased ipilimumab (two doses of placebo plus paclitaxel and carboplatin followed by four doses of ipilimumab plus paclitaxel and carboplatin).Treatment was administered intravenously every 3 weeks fore" 18 weeks (induction). Eligible patients continued ipilimumab or placebo every 12 weeks as maintenance therapy. Response was assessed by using immune-related response criteria and modified WHO criteria. The primary end point was immune-related progression-free survival (irPFS). Other end points were progression-free survival (PFS), best overall response rate (BORR), immune-related BORR (irBORR), overall survival (OS), and safety. Results: The study met its primary end point of improved irPFS for phased ipilimumab versus the control (hazard ratio [HR], 0.72; P = .05), but not for concurrent ipilimumab (HR, 0.81; P = .13). Phased ipilimumab also improved PFS according to modified WHO criteria (HR, 0.69; P = .02). Phased ipilimumab, concurrent ipilimumab, and control treatments were associated with a median irPFS of 5.7, 5.5, and4.6 months, respectively, a median PFS of 5.1, 4.1, and 4.2 months, respectively, an irBORR of 32%, 21% and 18%, respectively, a BORR of 32%, 21% and 14%, respectively, and a median OS of 12.2, 9.7, and 8.3 months. Overall rates of grade 3 and 4 immune-related AEs were 15%, 20%, and 6% for phased ipilimumab, concurrent ipilimumab, and the control, respectively. Two patients (concurrent, one patient; control, one patient) died from treatment-related toxicity. Conclusion: Phased ipilimumab plus paclitaxel and carboplatin improved irPFS and PFS, which supports additional investigation of ipilimumab in NSCLC. © 2012 by American Society of Clinical Oncology.

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Intl PMID:22547592 CI

Petkar, K., Dhanraj, P. and Sreekar, H.

Vacuum closure as a skin-graft dressing: A comparison against conventional dressingEuropean Journal of Plastic Surgery; 2012, 35 (8): 579-584

Background Grafting condition is one of the important determinants of skin-graft take. The technique of Vacuum-Closure has been claimed to improve the same and thereby graft take. However, there are few comparative studies against the conventional dressing technique evaluating its effectiveness in skin grafting. The present study was undertaken to compare Vacuum-closure with conventional dressing over freshly laid split-skin grafts. Methods Consecutive patients undergoing split-skin grafting were randomized into cases and controls. The grafts in controls were covered by aconventional dressing consisting of vaseline gauze and cotton pads. Those in cases were covered by a vacuum-closure assembly and connected to a wall-suction of 80 mm Hg continuously for four days. The percentage of graft take was assessed at nine days andat two weeks and duration of the dressing were compared between the two groups. Thedifference in cost of the dressing was noted down. Results Sixty four patients underwent split skin grafting of 71 wounds. Forty three of them were males and twenty nine were females. The grafted wounds included fresh surgically created wounds, traumatic wounds, acute and chronic burn wounds, post-inflammatory wounds and diabetic wounds. Thirty five of the grafts were cases and 36 were controls. Final graft take attwo weeks in the study group ranged from 70-100 per cent with an average of 95.29 per cent graft take (SD: 5.9) while the control group showed a graft take ranging between 0-100 percent with an average graft take of 85.89

percent (SD: 25.1) Durationof dressing of the grafts was 11.63 days in cases as against 15.11 days in controls. Thedifferences were statistically significant. The additional cost of the vacuum-closure assembly for an average sized ulcer was 6.27 pounds. Conclusion Negative pressure dressing increases the amount of graft take and should be used particularly when the wound bed and grafting conditions seem less-than-ideal for a complete graft take. Negative-pressure dressing can be economically and effectively assembled using locally available materials. Level of Evidence: Level I, therapeutic study. © 2011 Springer- Verlag.

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Intl CI

Shetty, R., Barreto, E. and Paul, K. M.

Suction assisted pulse lavage: Randomised controlled studies comparing its efficacy with conventional dressings in healing of chronic woundsInt Wound J. 2012 Sep 3. doi: 10.1111/j.1742-481X.2012.01062.x. [Epub ahead of print]

Chronic, open, non healing wounds pose a continual challenge in medicine as thetreatment is variable and there are no documented consistent responses. Although wound aetiologies vary and there are a number of factors that affect chronic wound pathogenesis, wound ischaemia and bacterial colonisation of wounds are the chief concerns among them. Conventionally pulse lavage has been used primarily as a wound debriding device. To address both the critical factors of wound ischaemia and bacterial burden, a couple of technical points were proposed and applied in this study. The objective of our study was to evaluate pulse lavage therapy's ability to improve the healing rate of chronic wounds compared to that of the traditional saline-wet-to-moist dressings. The study period was from 1 August 2010 to 31 January 2012 and was conducted in our institution. Thirty patients with 31 chronic, non healing wounds were enrolled in the study after obtaining proper consent. Subjects were randomised (15 patients each) to the pulse lavage group and the control group. Patients in the test group were subjected to irrigation of their wounds with pulsed lavage at 10 to 15 psi pressure. In the control group, wound was closed by applying moist betadine saline gauze dressings after cleaning with saline. Wounds treated with pulse lavage system significantly reduced in size, had better control of bacterial contamination and had overall faster healing rates. Efficacy of pulse lavage can be increased by correct method of administration of the irrigant. © 2012 The Authors. International Wound Journal ©2012 Blackwell Publishing Ltd and Medicalhelplines.com Inc.

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Intl PMID:22943586 CI