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1: Kumar S, Bijalwan P, Saini SK. Carcinoma buccal mucosa underlying a giant cutaneous horn: a case report and review of the literature. *Case Rep Oncol Med*. 2014;2014:518372. doi: 10.1155/2014/518372. Epub 2014 Jul 15. PubMed PMID: 25133002.

Cutaneous horn is a conical, dense, and hyperkeratotic protrusion that often appears similar to the horn of an animal. Giant cutaneous horns are rare; no incidence or prevalence has been reported. The significance of cutaneous horns is that they occur in association with, or as a response to, a wide variety of underlying benign, premalignant, and malignant cutaneous diseases. A case of giant cutaneous horn of left oral commissure along with carcinoma left buccal mucosa is reported here as an extremely rare oral/perioral pathology.

PMID: 25133002 [PubMed]

2: Singh L, Pushker N, Saini N, Sen S, Sharma A, Bakhshi S, Chawla B, Kashyap S. Expression of pro-apoptotic Bax and anti-apoptotic Bcl-2 proteins in human retinoblastoma. *Clin Experiment Ophthalmol*. 2014 Jul 31. doi: 10.1111/ceo.12397. [Epub ahead of print] PubMed PMID: 25132102.

**BACKGROUND:** Regulation of apoptosis is a complex process which involves a number of genes including bcl-2, bcl-x, bax and other bcl-2 family members. The aim of the present study is to assess the expression of Bcl-2 and Bax in retinoblastoma (Rb) and correlate them with clinical & histopathological parameters.

**METHOD:** The expression of Bcl-2 and Bax proteins were examined using immunohistochemistry, western blotting and RT-PCR in a series of 60 prospective cases of primary retinoblastoma tissues.

**RESULTS:** Immunohistochemistry showed expression of Bcl-2 in 40/60 (66.6%) whereas Bax expression was found only in 18/60 (30%) cases and these correlated with mRNA expression. The western blotting results also correlated well with the immunohistochemical expression of Bcl-2 (25kDa) and Bax (21kDa) proteins. Bcl-2 was expressed in 96% (24/25) of invasive tumors and in 45.7% (16/35) of non-invasive tumors. Expression of Bcl-2 significantly correlated with tumor invasiveness ( $P=0.0274$ ) and poor differentiation ( $P=0.0163$ ) whereas loss of Bax correlated with massive choroidal invasion and pTNM ( $p=0.0341$ ). However, no correlation was found between Bax and Bcl-2 expression.

**CONCLUSIONS:** Our findings suggest that these apoptotic regulatory proteins may serve as poor prognostic markers and can be used as a therapeutic target for the treatment of invasive retinoblastoma. Further functional studies are required to explore the role of Bax and Bcl-2 in retinoblastoma.

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PMID: 25132102 [PubMed - as supplied by publisher]

3: Walia R, Madan K, Mohan A, Jain D, Hadda V, Khilnani GC, Guleria R. Diagnostic utility of conventional transbronchial needle aspiration without rapid on-site evaluation in patients with lung cancer. *Lung India*. 2014 Jul;31(3):208-11. doi: 10.4103/0970-2113.135754. PubMed PMID: 25125804; PubMed Central PMCID: PMC4129589.

**BACKGROUND:** Endobronchial involvement is frequently absent in many patients with bronchogenic carcinoma. Malignant involvement may be confined to lymph nodes/peribronchial locations only or may be present along with endobronchial

lesions. Transbronchial needle aspiration (TBNA) is a flexible bronchoscopic technique which can be employed to obtain tissue samples from mediastinal lymph nodes or peribronchial locations. Although a safe and cost effective bronchoscopic modality, it is frequently underutilized owing to concerns regarding its diagnostic utility and safety. Herein, we describe our experience over 1 year on the diagnostic utility of TBNA without rapid on-site evaluation (ROSE) in patients with suspected diagnosis of lung cancer.

**MATERIALS AND METHODS:** We retrospectively reviewed the cases in which conventional TBNA-without ROSE was performed for suspected lung cancer, between January 2012 and December 2012. Each lymph node station from which aspiration was performed was sampled thrice and smears were prepared on slides which were later examined by a cytopathologist.

**RESULTS:** Twenty-six cases were retrieved in which conventional TBNA without ROSE for suspected lung cancer with mediastinal involvement was performed during the study period. Adequate lymph node sampling could be achieved in 57.7% cases. Conventional TBNA was diagnostic in 11 out of the 26 (42.3%) patients. The diagnostic yield improved to 73.3% in patients in whom an adequate lymph nodal sample could be obtained. TBNA was the sole diagnostic sample in six (54.5%) patients. Alternative diagnoses (sarcoidosis and tuberculosis) were obtained in two patients.

**CONCLUSION:** Conventional TBNA without ROSE is a safe and efficacious flexible bronchoscopic procedure which should be performed routinely from bronchoscopically accessible locations in patients with a suspected diagnosis of lung cancer.

PMCID: PMC4129589

PMID: 25125804 [PubMed]

4: Rizwan SA, Kant S, Goswami K, Rai SK, Misra P. Influence of alcohol on condom use pattern during non-spousal sexual encounter in male migrant workers in north India. *J Postgrad Med.* 2014 Jul-Sep;60(3):276-81. doi: 10.4103/0022-3859.138752. PubMed PMID: 25121367.

**CONTEXT:** Migrant workers constitute an important risk group for Human Immunodeficiency Virus/Acquired Immuno-Deficiency Syndrome transmission in India. Alcohol consumption before sexual intercourse has been postulated to influence condom use practices. This study aimed to assess this association with regard to non-spousal sexual encounters among male migrant workers in northern India.

**MATERIALS AND METHODS:** A cross-sectional facility-based survey was conducted in 2011. Male migrant workers aged  $\geq 18$  years, who were born outside Haryana, who had moved to the current location after 15 years of age, had worked in the current factory for at least 1 year, who were willing to participate and were able to give written, informed consent were included in the study. A consecutive sampling was performed. Descriptive, bivariate and multiple logistic regression analyses were carried out.

**RESULTS:** A total of 162 participants reported having experienced non-spousal sexual encounters in the last 1 year. The proportion of men who reported not having used a condom at their last non-spousal sexual encounter was 59.3%, and 78.4% of the men reported having consumed alcohol in the last 1 year. About 48.1% of men reported having consumed alcohol before their last non-spousal sexual encounter. Men who consumed alcohol were three times more likely to not use a condom at their last non-spousal sexual encounter (OR = 3.1, 95% CI: 1.5-6.4). This association persisted even after adjusting for relevant confounders.

CONCLUSION: Alcohol consumption had a negative influence on condom use during non-spousal sexual encounter among male migrant workers. An integrated approach to promote condom use and reduce alcohol consumption among migrant men needs to be undertaken through targeted intervention strategies.

PMID: 25121367 [PubMed - in process]

5: Rajkumari N, Gupta AK, Mathur P, Trikha V, Sharma V, Farooque K, Misra MC. Outcomes of surgical site infections in orthopedic trauma surgeries in a tertiary care centre in India. *J Postgrad Med.* 2014 Jul-Sep;60(3):254-9. doi: 10.4103/0022-3859.138731. PubMed PMID: 25121363.

BACKGROUND: Surgical site infections (SSIs) still cause significant morbidity and mortality despite advances in trauma care. We have studied in this paper the rate of SSIs, their outcomes in patients undergoing interventions for trauma and SSI trends in developing countries.

MATERIALS AND METHODS: A 16-month study (May, 2011- August, 2012) was carried out. Patients undergoing interventions for orthopedic trauma were followed and assessed for SSIs and their outcomes and antimicrobial sensitivity patterns of the micro-organisms isolated were noted and correlated.

RESULTS: A total of 40 (4.4%) confirmed cases of SSIs were identified among 852 patients of orthopedic trauma. Based on the new CDC criteria, after ruling out cellulitis, only 24 (2.6%) were found to have SSIs. A total of 12.5% of the SSIs were detected during follow-up. *Acinetobacter baumannii* was the predominant organism as also *Staphylococcus aureus*. Outcomes observed included changes in antibiotic regime, revision surgery, readmission to hospital and deaths.

CONCLUSION: SSI is prevalent in orthopaedic trauma patients and an active surveillance program will help in early management and prevention.

PMID: 25121363 [PubMed - in process]

6: Das P, Vijay MK, Joshi P, Yadav R, Singh G. Histological identification of Entomophthoromycosis in biopsy samples is required. *Indian J Pathol Microbiol.* 2014 Jul-Sep;57(3):514-6. doi: 10.4103/0377-4929.138814. PubMed PMID: 25118771.

PMID: 25118771 [PubMed - in process]

7: Vijay MK, Arava S. Solitary angiokeratoma of tongue: A rare entity clinically mistaken as a malignant tumor. *Indian J Pathol Microbiol.* 2014 Jul-Sep;57(3):510-1. doi: 10.4103/0377-4929.138810. PubMed PMID: 25118768.

PMID: 25118768 [PubMed - in process]

8: Verma AK, Ahuja V, Paul J. The Trend in Distribution of Q223R Mutation of Leptin Receptor Gene in Amoebic Liver Abscess Patients from North India: A Prospective Study. *Biomed Res Int.* 2014;2014:847132. doi: 10.1155/2014/847132. Epub 2014 Jul 9. PubMed PMID: 25114924; PubMed Central PMCID: PMC4121093.

Host genetic susceptibility is an important risk factor in infectious diseases. We explored the distribution of Q223R mutation in leptin receptor gene of amoebic liver abscess (ALA) patients of North India. A total of 55 ALA samples along with 102 controls were subjected to PCR-RFLP analysis. The frequency of allele "G"

(coding for arginine) was in general high in Indian population irrespective of the disease. Our results of Fisher exact test shows that heterozygous mutant (QQ versus QR,  $P = 0.049$ ) and homozygous mutant (QQ versus RR,  $P = 0.004$ ) were significantly associated with amoebic liver abscess when compared with homozygous wild (QQ).

PMCID: PMC4121093

PMID: 25114924 [PubMed - in process]

9: Kannan U, Mishra B, Subramanian A, Sagar S, Kumar S, Singhal M. Operative management of splenic injury in a patient with proteus syndrome. *J Emerg Trauma Shock*. 2014 Jul;7(3):233-5. doi: 10.4103/0974-2700.136872. PubMed PMID: 25114436; PubMed Central PMCID: PMC4126126.

A 20-year-old female with Proteus syndrome sustained splenic injury after fall from a bike. She was initially managed non-operatively at a different hospital for three days and was then referred to our level I trauma center in view of increasing abdominal pain and distention. On admission in the Emergency Department (ED), her pulse rate was 120 per minute and blood pressure was 108/68 mm Hg. Clinical examination showed a distended abdomen with left hypochondrial pain. Ultrasonogram (USG) and Computed Tomography (CT) of the abdomen showed splenomegaly and grade III splenic injury with significant hemoperitoneum. Her hemoglobin was 2.9 g/dl with packed cell volume (PCV) of 12%. In view of low hemoglobin and possibility of pathologic spleen, splenectomy was done. Microscopic examination of the spleen showed hemangiolympangioma. The patient was discharged on the 5(th) post-operative day and is doing well at 6 months of follow-up.

PMCID: PMC4126126

PMID: 25114436 [PubMed]

10: Singh PM, Borle A, Trikha A. Newer nonconventional modes of mechanical ventilation. *J Emerg Trauma Shock*. 2014 Jul;7(3):222-7. doi: 10.4103/0974-2700.136869. Review. PubMed PMID: 25114434; PubMed Central PMCID: PMC4126124.

The conventional modes of ventilation suffer many limitations. Although they are popularly used and are well-understood, often they fail to match the patient-based requirements. Over the years, many small modifications in ventilators have been incorporated to improve patient outcome. The ventilators of newer generation respond to patient's demands by additional feedback systems. In this review, we discuss the popular newer modes of ventilation that have been accepted in to clinical practice. Various intensive care units over the world have found these modes to improve patient ventilator synchrony, decrease ventilator days and improve patient safety. The various modes discussed in this review are: Dual control modes (volume assured pressure support, volume support), Adaptive support ventilation, proportional assist ventilation, mandatory minute ventilation, Bi-level airway pressure release ventilation, (BiPAP), neurally adjusted ventilatory assist and NeoGanesh. Their working principles with their advantages and clinical limitations are discussed in brief.

PMCID: PMC4126124

PMID: 25114434 [PubMed]

11: Aggarwal P, Galwankar S, Kalra OP, Bhalla A, Bhoi S, Sundarakumar S. The 2014 Academic College of Emergency Experts in India's Education Development Committee

(EDC) White Paper on establishing an academic department of Emergency Medicine in India - Guidelines for Staffing, Infrastructure, Resources, Curriculum and Training. *J Emerg Trauma Shock*. 2014 Jul;7(3):196-208. doi: 10.4103/0974-2700.136866. PubMed PMID: 25114431; PubMed Central PMCID: PMC4126121.

Emergency medicine services and training in Emergency Medicine (EM) has developed to a large extent in developed countries but its establishment is far from optimal in developing countries. In India, Medical Council of India (MCI) has taken great steps by notifying EM as a separate specialty and so far 20 medical colleges have already initiated 3-year training program in EM. However, there has been shortage of trained faculty, and ambiguity regarding curriculum, rotation policy, infrastructure, teachers' eligibility qualifications and scheme of examination. Academic College of Emergency Experts in India (ACEE-India) has been a powerful advocate for developing Academic EM in India. The ACEE's Education Development Committee (EDC) was created to chalk out guidelines for staffing, infrastructure, resources, curriculum, and training which may be of help to the MCI and the National Board of Examinations (NBE) to set standards for starting 3-year training program in EM and develop the departments of EM as centers of quality education, research, and treatment across India. This paper has made an attempt to give recommendations so as to provide a uniform framework to the institutions, thus guiding them towards establishing an academic Department of EM for starting the 3-year training program in the specialty of EM.

PMCID: PMC4126121

PMID: 25114431 [PubMed]

12: Pahwa S, Srivastava DN, Sharma R, Gamanagatti S, Kotwal PP, Sharma V. Comparison of conventional MRI and MR arthrography in the evaluation wrist ligament tears: A preliminary experience. *Indian J Radiol Imaging*. 2014 Jul;24(3):259-67. doi: 10.4103/0971-3026.137038. PubMed PMID: 25114389; PubMed Central PMCID: PMC4126141.

AIMS: To compare conventional magnetic resonance imaging (MRI) and direct magnetic resonance (MR) arthrography in the evaluation of triangular fibrocartilage complex (TFCC) and intrinsic wrist ligament tears.  
MATERIALS AND METHODS: T1-weighted, fat suppressed (FS) proton density plus T2-weighted (FS PD/T2), 3D multiple-echo data image combination (MEDIC) sequences and direct MR arthrography were performed in 53 patients with wrist pain. Images were evaluated for the presence and location of TFCC, scapholunate ligament (SLL) and lunatotriquetral ligament (LTL) tears, and imaging findings were compared with operative findings in 16 patients who underwent arthroscopy or open surgery (gold standard).

RESULTS: SIXTEEN PATIENTS UNDERWENT ARTHROSCOPY/OPEN SURGERY: 12 TFCC tears were detected arthroscopically out of which 9 were detected on FS PD/T2 sequence, 10 on MEDIC sequence, and all 12 were detected on MR arthrography. The sensitivities of FS PD/T2, MEDIC sequences, and MR arthrography in the detection of TFCC tears were 75%, 83.3%, and 100%, respectively. Out of the eight arthroscopically confirmed SLL tears, three tears were detected on FS PD/T2 sequence, five on MEDIC sequence, and all eight were visualized on MR arthrography. The sensitivities of FS PD/T2, MEDIC sequences, and MR arthrography in detecting SLL tears were 37.5%, 62.5%, and 100%, respectively. One arthroscopically confirmed LTL tear was diagnosed on FS PD/T2 sequence, three on MEDIC sequence, and all five arthroscopically confirmed LTL tears were detected with MR arthrography. The sensitivities of PD, MEDIC sequences, and MR arthrography in detecting LTL tears were 20%, 40%, and 100%, respectively.

CONCLUSIONS: MR arthrography is the most sensitive and specific imaging modality for the evaluation of wrist ligament tears.

PMCID: PMC4126141

PMID: 25114389 [PubMed]

13: Sokhal N, Goyal K, Chowdhury T, Rath GP. See-saw pattern in ventilator graphic: Is there any story behind? Niger Med J. 2014 Jul;55(4):359-61. doi: 10.4103/0300-1652.137232. PubMed PMID: 25114376; PubMed Central PMCID: PMC4124554.

The importance of ventilator graphics cannot be over emphasized that provide the useful information about airway, ventilation, compliance and lung mechanics. Some bizarre forms of graphics are usually overlooked in view of artifacts, but sometimes these tracings may in fact predict some relevant information.

PMCID: PMC4124554

PMID: 25114376 [PubMed]

14: Kumar A, Suri A, Sharma BS. Severe valproate induced hyperammonemic encephalopathy successfully managed with peritoneal dialysis. Indian J Crit Care Med. 2014 Jul;18(7):461-3. doi: 10.4103/0972-5229.136076. PubMed PMID: 25097360; PubMed Central PMCID: PMC4118513.

Valproic acid (VPA) is a commonly used drug for epilepsy, psychiatric disorders and migraine and is frequently used in neurosurgical intensive care units. Though most of its side-effects are mild and transient, certain idiosyncratic side-effects have been attributed to VPA. Valproate induced hyperammonemia (VIH) is one such side-effect. VIH can produce symptoms of encephalopathy known as valproate induced hyperammonemic encephalopathy (VHE). VIH and VHE usually respond to withdrawal of VPA. However, in some cases VHE can be unresponsive to supportive measures and severe enough to be life-threatening. In such cases, dialysis can be used to rapidly reverse hyperammonemia and VHE and can prove to be a lifesaving measure. We report such a case of VIH and life-threatening VHE in a postoperative neurosurgical patient that was managed successfully with peritoneal dialysis.

PMCID: PMC4118513

PMID: 25097360 [PubMed]

15: Ahuja A, Gupta R, Sharma A, Bagga A, Bhowmik DM, Agarwal SK, Dinda AK. Idiopathic collapsing glomerulopathy: A clinicopathologic analysis of 30 cases. Indian J Nephrol. 2014 Jul;24(4):239-42. doi: 10.4103/0971-4065.133009. PubMed PMID: 25097337; PubMed Central PMCID: PMC4119337.

Collapsing glomerulopathy (CG) is a distinct clinicopathologic entity associated with various infections, medications and acute ischemia. There have been few scattered reports of CG from India. This study aimed at evaluating the clinicopathologic features of idiopathic CG in Indian patients with comparison between adult-onset and childhood CG. This study included all cases of idiopathic CG diagnosed over a period of 4 years (2006-2009). Appropriate clinical details and laboratory findings were retrieved. Renal biopsies were reviewed and detailed pathologic features assessed. Statistical analysis was performed to compare various features between adult-onset and childhood CG. Over these 4 years, 30 cases of idiopathic CG were diagnosed. Of these, 11 were children. Childhood CG cases had longer duration of symptoms and lower serum urea and creatinine levels

compared with adult patients. In renal histology, tubular atrophy and interstitial fibrosis was frequent in our cases. Pediatric cases of CG showed a higher proportion of segmental glomerulosclerosis. On clinical follow-up, nine of the 30 patients progressed to end-stage renal disease and these included two pediatric patients. Idiopathic CG is a significant cause of renal dysfunction in both pediatric and adult patients. Childhood and adult-onset CG differ in few clinicopathologic features. Early and accurate diagnosis of CG is imperative for appropriate management of these patients.

PMCID: PMC4119337

PMID: 25097337 [PubMed]

16: Kumar R. The shrinking world. *Indian J Urol.* 2014 Jul;30(3):239-40. doi: 10.4103/0970-1591.135632. PubMed PMID: 25097304; PubMed Central PMCID: PMC4120205.

PMCID: PMC4120205

PMID: 25097304 [PubMed]

17: Das P, Kandel R, Sikka K, Dey A. Reversible ototoxicity: a rare adverse reaction of liposomal amphotericin-B used for the treatment of antimony-resistant visceral leishmaniasis in an elderly male. *Clin Med Insights Case Rep.* 2014 Jul 24;7:63-6. doi: 10.4137/CCRep.S15111. eCollection 2014. PubMed PMID: 25093006; PubMed Central PMCID: PMC4116361.

Amphotericin-B, a broad spectrum antifungal agent, has been known to cause adverse effects such as nephrotoxicity and infusion-related side effects such as fever, chills, rigor, and arthralgias. However, ototoxicity as an adverse effect of Amphotericin-B has not yet been reported in medical literature. We here report a case of a reversible form of ototoxicity induced by liposomal Amphotericin-B (L-AmB).

PMCID: PMC4116361

PMID: 25093006 [PubMed]

18: Karthikeyan G, Ananthakrishnan R, Devasenapathy N, Narang R, Yadav R, Seth S, Singh S, Goswami KC, Bahl VK. Transient, Subclinical Atrial Fibrillation and Risk of Systemic Embolism in Patients With Rheumatic Mitral Stenosis in Sinus Rhythm. *Am J Cardiol.* 2014 Jul 2. pii: S0002-9149(14)01363-0. doi: 10.1016/j.amjcard.2014.06.016. [Epub ahead of print] PubMed PMID: 25086468.

Stroke and systemic embolism occur frequently in patients with rheumatic mitral stenosis (MS) in sinus rhythm (SR), but the risk and predictors of embolic events in this population are not well studied. The aim of this study was to determine if transient, subclinical atrial fibrillation (AF) increases the risk of systemic embolism in patients with MS in SR. A single-center, prospective observational study of patients with rheumatic MS in SR was performed. The rate of the composite primary outcome of stroke, transient ischemic attack, or non-central nervous system embolism was determined, as well as the predictive value of Holter-detected episodes of transient (<30 seconds), subclinical AF for this outcome. Hazard ratios were derived for subclinical AF, after adjustment for clinical and echocardiographic predictors of systemic embolism, using Cox regression. The sensitivity, specificity, and area under the receiver-operating characteristic curve of subclinical AF were determined for the primary outcome. Among 179 patients (mean follow-up 10.2 months), the rate of the primary outcome was 5.3/100 patient-years (95% confidence interval [CI] 2.6 to 10.5). In



univariate analysis, subclinical AF (hazard ratio 4.54, 95% CI 1.08 to 19.0,  $p = 0.038$ ) and dense spontaneous echocardiographic contrast (hazard ratio 4.32, 95% CI 1.03 to 18.09,  $p = 0.045$ ) were predictors of the primary outcome. In multivariate analysis, subclinical AF remained the only significant predictor (hazard ratio 5.02, 95% CI 1.15 to 22.0,  $p = 0.032$ ). Subclinical AF had an area under the receiver-operating characteristic curve of 0.68 and high negative predictive value (97.7%) for the primary outcome. In conclusion, Holter-detected, transient (<30 seconds), subclinical AF is a predictor of stroke and systemic embolism in patients with rheumatic MS in SR. Considering the high risk for embolism, randomized trials of oral anticoagulation are needed in this population.

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PMID: 25086468 [PubMed - as supplied by publisher]

19: Faruq M, Srivastava AK, Suroliya V, Kumar D, Garg A, Shukla G, Behari M. Identification of FXTAS presenting with SCA 12 like phenotype in India. *Parkinsonism Relat Disord*. 2014 Jul 17. pii: S1353-8020(14)00260-0. doi: 10.1016/j.parkreldis.2014.07.001. [Epub ahead of print] PubMed PMID: 25085749.

**BACKGROUND:** Fragile X-associated Tremor/Ataxia syndrome (FXTAS) is a clinically heterogeneous disorder characterized predominantly by tremor, followed by late onset gait ataxia, autonomic dysfunction and/or cognitive impairment. We aimed to screen FMR1-CGG repeats in our cohort of progressive late-onset cerebellar ataxia/tremor cohort to characterize the occurrence of FXTAS in India.

**METHODS:** We have screened FMR1-CGG repeats in 109 patients and 173 healthy control subjects. Our cohort comprised: a) group of patients with predominant cerebellar ataxia and/or tremor. b.) suspected cases of MSA and c.) patients who presented SCA12-like neurological manifestations (late onset predominant tremor and/or ataxia). All the cases were ruled out for known triplet-repeat-expansion (TRE) SCA mutations.

**RESULTS:** We have found three FMR1-premutation carriers among the cases. Two of them (with CGG-96 and CGG-102) were under evaluation for their SCA12-like manifestations and another (CGG-78) had progressive gait ataxia. Overall the frequency of FXTAS in our cohort was found to be 3.3% among cases of late onset cerebellar-ataxia/tremor; however, incidences were higher among cases with SCA12-like syndrome (9%, 2/23).

**CONCLUSION:** Finding FXTAS in patients with SCA12-like manifestation suggests that TRE in the 5'UTR of the gene is the common cue connecting two disorders with common phenotype of tremor/ataxia. This knowledge might shed light upon their sharing of molecular neuropathology.

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PMID: 25085749 [PubMed - as supplied by publisher]

20: Silan V, Kant S, Archana S, Misra P, Rizwan S. Determinants of underutilisation of free delivery services in an area with high institutional delivery rate: a qualitative study. *N Am J Med Sci*. 2014 Jul;6(7):315-20. doi: 10.4103/1947-2714.136906. PubMed PMID: 25077079; PubMed Central PMCID: PMC4114008.

**BACKGROUND:** There has been an increase in institutional delivery rates in India

in the recent years. However, in areas with high institutional delivery rates, most deliveries (>50%) occur in private institutions rather than in government facilities where zero expense delivery services are being provided.

AIM: This study aimed to understand, from the community health volunteers' viewpoint, the reasons for underutilization of zero expense delivery services provided in government health facilities.

MATERIALS AND METHODS: Five Focused Group Discussions (FGD) were conducted among Accredited Social Health Activist (ASHAs) of a Primary Health Centre (PHC) in Dayalpur village, Haryana in December 2012. Participants were asked to articulate the possible reasons that they thought were responsible for expectant mothers not choosing to deliver in government health facilities. Verbal informed consent was obtained from all participants.

RESULT: The commonly stated reasons for underutilization of government health facilities for delivery services were lack of quality care, abominable behaviour of hospital staff, poor transportation facilities, and frequent referrals to higher centres.

CONCLUSION: This study reflected the necessity for new policies to make government health facilities friendlier and more easily accessible to clients and to make all government hospitals follow a minimum set of standards for providing quality care.

PMCID: PMC4114008

PMID: 25077079 [PubMed]

21: Gulati S, Yoganathan S, Chakrabarty B. Epilepsy, Cognition and Behavior. Indian J Pediatr. 2014 Jul 31. [Epub ahead of print] PubMed PMID: 25073691.

Epilepsy is defined as two or more unprovoked seizures. Epileptic patients have intellectual disability and behavioral co-morbidities to the tune of up to 25 and 75% respectively. Various factors like underlying etiology, socioeconomic environment at home, age at onset, seizure semiology, seizure descriptors like duration, severity and frequency, therapy related adverse effects secondary to antiepileptic drugs and epilepsy surgery have been implicated for the causation of cognitive and behavioral impairment in epilepsy. Cognitive epilepsy has emerged as a specific entity. This may manifest as a transient behavioral or cognitive change, insidious onset subacute to chronic encephalopathy or more catastrophic in the form of nonconvulsive status epilepticus. Cognitive impairment seen in epileptic children include difficulties in learning, memory, problem solving as well as concept formation. Anxiety, depression and attention deficit hyperkinetic disorders are the most common psychiatric co-morbidities seen. Investigating a child with epilepsy for cognitive and behavioral impairment is difficult as these tests would require cooperation from the patient's side to a significant extent. A rational approach towards treatment would be judicious selection of antiepileptic drugs, treatment of underlying cause, appropriate management of behavioral co-morbidities including psychopharmacotherapy and a trial of immunotherapy (particularly in cognitive epilepsies), wherever appropriate.

PMID: 25073691 [PubMed - as supplied by publisher]

22: Agarwal KK, Singla S, Arora G, Bal C. (177)Lu-EDTMP for palliation of pain from bone metastases in patients with prostate and breast cancer: a phase II study. Eur J Nucl Med Mol Imaging. 2014 Jul 29. [Epub ahead of print] PubMed PMID: 25070686.

**PURPOSE:** The purpose of this study was to evaluate the efficacy and safety of (177)Lu-EDTMP for pain palliation in patients with bone metastases from castration-resistant prostate and breast cancer. The secondary objective was to compare low-dose and high-dose (177)Lu-EDTMP in bone pain palliation.

**METHODS:** Included in the study were 44 patients with documented breast carcinoma (12 patients; age 47±13 years) or castration-resistant prostate carcinoma (32 patients; age 66±9 years) and skeletal metastases. Patients were randomized into two equal groups treated with (177)Lu-EDTMP intravenously at a dose of 1,295 MBq (group A) or 2,590 MBq (group B). Pain palliation was evaluated using a visual analogue score (VAS), analgesic score (AS) and Karnofsky performance score (KPS) up to 16 weeks. Toxicity was assessed in terms of haematological and renal parameters.

**RESULTS:** The overall response rate (in all 44 patients) was 86 %. Complete, partial and minimal responses were seen in 6 patients (13 %), 21 patients (48 %) and 11 patients (25 %), respectively. A favourable response was seen in 27 patients (84 %) with prostate cancer and in 11 patients (92 %) with breast cancer. There was a progressive decrease in the VAS from baseline up to 4 weeks ( $p < 0.05$ ). Also, AS decreased significantly from  $1.8 \pm 0.7$  to  $1.2 \pm 0.9$  ( $p < 0.0001$ ). There was an improvement in quality of life of the patients as reflected by an increase in mean KPS from  $56 \pm 5$  to  $75 \pm 7$  ( $p < 0.0001$ ). The overall response rate in group A was 77 % compared to 95 % in group B ( $p = 0.188$ ). There was a significant decrease in VAS and AS accompanied by an increase in KPS in both groups. Nonserious haematological toxicity (grade I/II) was observed in 15 patients (34 %) and serious toxicity (grade III/IV) occurred in 10 patients (23 %). There was no statistically significant difference in haematological toxicity between the groups.

**CONCLUSION:** (177)Lu-EDTMP was found to be a safe and effective radiopharmaceutical for bone pain palliation in patients with metastatic prostate and breast carcinoma. There were no differences in efficacy or toxicity between patients receiving low-dose and high-dose (177)Lu-EDTMP.

PMID: 25070686 [PubMed - as supplied by publisher]

23: Vajpayee RB, Shafi SN, Maharana PK, Sharma N, Jhanji V. Evaluation of corneal collagen cross linking as an additional therapy in mycotic keratitis. Clin Experiment Ophthalmol. 2014 Jul 28. doi: 10.1111/ceo.12399. [Epub ahead of print] PubMed PMID: 25070527.

**BACKGROUND:** To report the treatment outcomes of mycotic keratitis with collagen crosslinking (CXL).

**DESIGN:** Retrospective study **PARTICIPANTS:** Patients with smear-positive moderate mycotic keratitis **METHODS:** A retrospective case-file analysis was performed to identify cases of moderate mycotic keratitis treated with and without additional CXL in addition to intensive topical antifungal therapy. Patients in which CXL was performed on the day of presentation (group 1) were compared with patients who received medical treatment alone in the form of 5% natamycin eye drops (group 2).

**MAIN OUTCOME MEASURES:** The primary outcome measure was the time taken for resolution of infection.

**RESULTS:** Overall, 41 cases were included for analysis (group 1, 20 cases; group 2, 21 cases). Mean age of the patients was comparable in both groups ( $46.5 \pm 17.01$  vs  $41.2 \pm 20.7$  years;  $p = 0.36$ ). Average infiltrate size was  $16.35 \pm 6.8$  mm(2) in group 1 and  $17.09 \pm 7.4$  mm(2) in group 2 ( $p = 0.83$ ). Overall, Aspergillus was the most

commonly isolated organism (n= 4 group 1; n=6 group 2). Resolution of infection was observed in 18 cases (90%) in group 1 and 18 (85.71%) cases in group 2. The average healing time was 30.85±26.6 days in group 1, while it was 31.28±19.97 days in group 2 (p=0.94). Final BCVA in group 1 was 1.13±0.55 and 1.25±0.46 in group 2 (p=0.46). A tectonic keratoplasty was performed in 2 cases in group 1 and 3 cases in group 2 (p=1.00).

CONCLUSIONS: In our study, additional CXL treatment did not have any advantage over medical management in cases with moderate mycotic keratitis.

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PMID: 25070527 [PubMed - as supplied by publisher]

24: Dhull S, Mukherjee A, Karunanithi S, Durgapal P, Bal C, Kumar R. Bilateral primary renal lymphoma in a pediatric patient: Staging and response evaluation with (18)F-FDG PET/CT. Rev Esp Med Nucl Imagen Mol. 2014 Jul 21. pii: S2253-654X(14)00120-6. doi: 10.1016/j.remnm.2014.05.004. [Epub ahead of print] PubMed PMID: 25065972.

Primary renal lymphoma (PRL) is a rare disease. We here present the case of an 8-year-old child who presented with bilateral renal masses. On biopsy, it was confirmed to be B-cell non-Hodgkin's lymphoma. (18)F-fluorodeoxyglucose ((18)F-FDG) positron emission tomography-computed tomography (PET/CT) for staging demonstrated (18)F-FDG avid bilateral renal masses, with no other abnormal focus. Follow up (18)F-FDG PET/CT showed complete resolution of the disease after six cycles of chemotherapy. Here we have highlighted the potential role of (18)F-FDG PET/CT in staging and response evaluation of a patient with PRL and presented a brief review.

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PMID: 25065972 [PubMed - as supplied by publisher]

25: Behera MK, Julka PK, Rath GK. Pattern of supportive care in elderly patients of head & neck cancer receiving radiation therapy. J Geriatr Oncol. 2014 Jul;5 Suppl 1:S17-8. doi: 10.1016/j.jgo.2014.06.040. Epub 2014 Jul 3. PubMed PMID: 25063625.

PMID: 25063625 [PubMed - in process]

26: Nattusamy L, Madan K, Bhalla AS, Guleria R. Reversed halo sign in active pulmonary tuberculosis. BMJ Case Rep. 2014 Jul 25;2014. pii: bcr2013202981. doi: 10.1136/bcr-2013-202981. PubMed PMID: 25063317.

PMID: 25063317 [PubMed - in process]

27: Sharma SK, Kohli M, Chaubey J, Yadav RN, Sharma R, Singh BK, Sreenivas V, Sharma A, Bhatia R, Jain D, Seenu V, Dhar A, Soneja M. Evaluation of Xpert MTB/RIF assay performance in diagnosing extrapulmonary tuberculosis among adults in a tertiary care centre in India. Eur Respir J. 2014 Jul 25. pii: erj00590-2014. [Epub ahead of print] PubMed PMID: 25063241.

PMID: 25063241 [PubMed - as supplied by publisher]

28: Gupta V, Rao A, Gupta S. Scrotal cutaneous toxicity: an uncommon but important side-effect of sunitinib. *J Eur Acad Dermatol Venereol*. 2014 Jul 25. doi: 10.1111/jdv.12615. [Epub ahead of print] PubMed PMID: 25060046.

PMID: 25060046 [PubMed - as supplied by publisher]

29: Kaur J, Pandit S, Sharma MC, Julka PK, Rath GK. Intradural extra medullary hemangiopericytoma of dorsal spine. *Childs Nerv Syst*. 2014 Jul 25. [Epub ahead of print] PubMed PMID: 25059986.

**PURPOSE:** Spinal hemangiopericytoma is a rare neoplasm that behaves similar to intracranial hemangiopericytoma, with approximately 60 cases being reported in the literature of which only 10 are located in the intradural extramedullary (IDEM) location.

**METHODS:** We report a rare case of recurrent IDEM hemangiopericytoma of dorsal spine in a 16-year-old boy treated with surgery and adjuvant radiotherapy.

**RESULTS:** Patient is disease free at 5 years posttreatment with residual neurological deficit, but is able to carry out his activities of daily living.

**CONCLUSION:** Gross total resection, if feasible, followed by radiotherapy is the initial treatment of choice as radiotherapy improves recurrence free survival as well as overall survival.

PMID: 25059986 [PubMed - as supplied by publisher]

30: Banerjee C, Singh A, Das TK, Raman R, Shrivastava A, Mazumder S. Ameliorating ER-stress attenuates *Aeromonas hydrophila*-induced mitochondrial dysfunctioning and caspase mediated HKM apoptosis in *Clarias batrachus*. *Sci Rep*. 2014 Jul 25;4:5820. doi: 10.1038/srep05820. PubMed PMID: 25059203.

Endoplasmic reticulum (ER)-stress and unfolding protein response (UPR) has not been implied in *Aeromonas hydrophila*-pathogenicity. We report increased expression of the ER-stress markers: CHOP, BiP and phospho-eIF2 $\alpha$  in *A. hydrophila*-infected headkidney macrophages (HKM) in *Clarias batrachus*. Pre-treatment with ER-stress inhibitor, 4-PBA alleviated ER-stress and HKM apoptosis suggesting ER-UPR critical for the process. The ER-Ca(2+) released via inositol-triphosphate and ryanodine receptors induced calpain-2 mediated superoxide ion generation and consequent NF- $\kappa$ B activation. Inhibiting NF- $\kappa$ B activation attenuated NO production suggesting the pro-apoptotic role of NF- $\kappa$ B on HKM pathology. Calpain-2 activated caspase-12 to intensify the apoptotic cascade through mitochondrial-membrane potential ( $\psi$ m) dissipation and caspase-9 activation. Altered mitochondrial ultra-structure consequent to ER-Ca(2+) uptake via uniporters reduced  $\psi$ m and released cytochrome C. Nitric oxide induced the cGMP/PKG-dependent activation of caspase-8 and truncated-Bid formation. Both the caspases converge onto caspase-3 to execute HKM apoptosis. These findings offer a possible molecular explanation for *A. hydrophila* pathogenicity.

PMID: 25059203 [PubMed - in process]

31: Titiyal JS, Sharma N, Agarwal AK, Prakash G, Tandon R, Vajpayee R. Live Related versus Cadaveric Limbal Allograft in Limbal Stem Cell Deficiency. *Ocul Immunol Inflamm*. 2014 Jul 24:1-8. [Epub ahead of print] PubMed PMID: 25058380.

**Abstract Aim:** To compare outcomes of live related limbal allograft (Lr-CLAL)

versus cadaveric keratolimbal allograft (KLAL) in limbal stem cell deficiency (LSCD) secondary to ocular burns. Methods: Twenty patients with stage IIb LSCD were randomized so that cases underwent either Lr-CLAL or KLAL. Fibrovascular pannus was removed and superficial keratectomy done on the recipient bed. Limbal lenticule of 2-3 clock hours' length was harvested from the donor, which was placed over the host bed and sutured followed by bandage contact lens application. Parameters assessed were uncorrected visual acuity (UCVA), best corrected visual acuity (BCVA), conjunctivalization, corneal neovascularization, epithelial defects, corneal clarity, Schirmer's test, tear film breakup time (tBUT), and ultrasonic pachymetry. Results: At 6 months follow-up, the Lr-CLAL group had a higher gain in vision ( $p=0.029$ ), decrease in conjunctivalization ( $p=0.009$ ), and increase in Schirmer's values ( $p=0.009$ ). Conclusion: Lr-CLAL seems to have better result in terms of vision gain and ocular surface restoration.

PMID: 25058380 [PubMed - as supplied by publisher]

32: Pushker N, Khurana S, Kashyap S, Sen S, Shrey D, Meel R, Chawla B, Bajaj MS. Orbital schwannoma: a clinicopathologic study. *Int Ophthalmol*. 2014 Jul 23. [Epub ahead of print] PubMed PMID: 25052540.

The aim of the study was to study the clinical, radiological and histopathological characteristics of orbital schwannomas. It is a retrospective study conducted at a tertiary eye care hospital. A review of histopathological records of the orbital tumors operated between 1993 and 2011 was done. The clinical, imaging and histopathological details of cases of orbital schwannoma were analyzed. Forty-nine cases of orbital schwannomas identified. The age ranged from 8 to 65 years with a female preponderance. The median duration of symptoms was 3 years. Computed tomography findings varied from a hypodense to hyperdense lesion with nil to marked contrast enhancement. USG demonstrated a defined lesion with variable internal reflectivity. Varied proportions of Antoni A and Antoni B areas were found on histopathology of the masses. Hypodense or cystic areas on imaging significantly correlated with Antoni B areas on histopathology. Orbital schwannoma is a rare tumor. The incidence of schwannoma in our institution is 6.5 %. Variable imaging features were found. The definite diagnosis can be established on the basis of histopathological and immunohistochemical studies.

PMID: 25052540 [PubMed - as supplied by publisher]

33: Kumar G, Jain V, Pandey RK, Gadwal M. Effect of Different Design Preparations on the Flexural and Fracture Strength of Fiber-Reinforced Composite Fixed Partial Dentures: An In Vitro Study. *J Prosthodont*. 2014 Jul 22. doi: 10.1111/jopr.12181. [Epub ahead of print] PubMed PMID: 25052502.

**PURPOSE:** To determine and compare the flexural and fracture strength of three-unit fiber-reinforced composite (FRC) fixed partial dentures (FPDs) using three abutment design preparations.

**MATERIAL AND METHODS:** The flexural and fracture strength of three-unit FRC FPDs were evaluated using three design preparations of the abutments (conventional full crown [group A], box-shaped [group B], and tub-shaped [group C]). Thirty three-unit FRC FPDs were fabricated (10 specimens per group) for the replacement of missing mandibular first molars and were adhesively luted to extracted human teeth. The flexural and fracture strength were determined using a universal testing machine with a steel loading pin of 20 mm diameter with a 3-mm-diameter hardened circular tip. Each specimen was evaluated under SEM to determine mode of failure.

RESULTS: Mean fracture strength for group A was  $820.00 \pm 56.51$  N, group B was  $536.94 \pm 65.62$  N, and group C was  $501.24 \pm 66.71$  N. The highest mean flexural strength was found in group A ( $68.33 \pm 4.71$  MPa), followed by group B ( $44.74 \pm 5.46$  MPa) and lowest in group C ( $41.77 \pm 5.56$  MPa). The SEM evaluation showed partial or complete debonding of veneering composite from fiber framework, leaving intact fiber frameworks in all the specimens.

CONCLUSION: Full-coverage design had significantly higher flexural and fracture strengths than box and tub-shaped designs. Since both values were noted to be in the order of masticatory stresses, the full coverage design is a good alternative for the replacement of missing molar teeth; however, the framework veneering composite interface was the weakest phase of FRC FPDs, thus indicating that further improvement in veneering composite or fiber framework is needed to improve the compatibility of veneering composite with that of fiber framework for long-term clinical implications.

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PMID: 25052502 [PubMed - as supplied by publisher]

34: Suri A, Tripathi M, Deo RC. Anterolateral Trans-cavernous Extradural Petrosectomy Approach: 3-D Demonstration in Cadavers. *Neurosurgery*. 2014 Jul 18. [Epub ahead of print] PubMed PMID: 25050585.

Kawase's technique of extradural subtemporal trans-petrosal trans-tentorial approach is a popular middle cranial fossa approach for lesions of the petroclival region. This is one of the most commonly practiced procedures because of surgeons' familiarity and years of successful practice over the last two decades. Inappropriate handling may put several neurovascular structures at risk, because the neighborhood of the petrous apex is densely crowded with internal carotid artery (ICA), 3 -8 cranial nerves, and cochleovestibular complex. Lesions extending into anterior cavernous sinus demand additional dissection and exposure. The authors here describe an extradural technique of exposure of the anterior petrous apex with inter-dural dissection in the lateral wall of the cavernous sinus with medial mobilization of the trigeminal nerve. It provides a larger rhomboid at the petrous apex with greater exposure of anterior and posterior cranial fossae. Extradural anterior clinoidectomy and anterior cavernous dissection is demonstrated for lesions with para-sellar and orbital extension. The limitations of this approach are increased operative time and unfamiliar anatomy especially in the region of the cavernous sinus. Potential complications include increased blood loss, CSF leak, and injury to cochlear apparatus and cranial nerves (3-6). Skull base approaches warrant high competence and proficiency in the treating surgeon, as surgical risks are high and margin of error is less. The complexities of skull base anatomy and dissection must be mastered by cadaver dissection in the laboratory. This educational 3-D video of cadaver dissection and 3-D animation graphics is directed for demonstration of the pertinent anatomy and an extradural approach for the anterior petrous apex and cavernous sinus exposure.

PMID: 25050585 [PubMed - as supplied by publisher]

35: Kumar V, Nag TC, Sharma U, Mewar S, Jagannathan NR, Wadhwa S. High resolution (1)H NMR-based metabonomic study of the auditory cortex analogue of developing chick (*Gallus gallus domesticus*) following prenatal chronic loud music and noise exposure. *Neurochem Int*. 2014 Jul 15;76C:99-108. doi: 10.1016/j.neuint.2014.07.002. [Epub ahead of print] PubMed PMID: 25049174.

Proper functional development of the auditory cortex (ACx) critically depends on early relevant sensory experiences. Exposure to high intensity noise (industrial/traffic) and music, a current public health concern, may disrupt the proper development of the ACx and associated behavior. The biochemical mechanisms associated with such activity dependent changes during development are poorly understood. Here we report the effects of prenatal chronic (last 10days of incubation), 110dB sound pressure level (SPL) music and noise exposure on metabolic profile of the auditory cortex analogue/field L (AuL) in domestic chicks. Perchloric acid extracts of AuL of post hatch day 1 chicks from control, music and noise groups were subjected to high resolution (700MHz)  $^1\text{H}$  NMR spectroscopy. Multivariate regression analysis of the concentration data of 18 metabolites revealed a significant class separation between control and loud sound exposed groups, indicating a metabolic perturbation. Comparison of absolute concentration of metabolites showed that overstimulation with loud sound, independent of spectral characteristics (music or noise) led to extensive usage of major energy metabolites, e.g., glucose,  $\beta$ -hydroxybutyrate and ATP. On the other hand, high glutamine levels and sustained levels of neuromodulators and alternate energy sources, e.g., creatine, ascorbate and lactate indicated a systems restorative measure in a condition of neuronal hyperactivity. At the same time, decreased aspartate and taurine levels in the noise group suggested a differential impact of prenatal chronic loud noise over music exposure. Thus prenatal exposure to loud sound especially noise alters the metabolic activity in the AuL which in turn can affect the functional development and later auditory associated behaviour.

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PMID: 25049174 [PubMed - as supplied by publisher]

36: Kaur K, Taneja NK, Dhingra S, Tyagi JS. DevR (DosR) mimetic peptides impair transcriptional regulation and survival of Mycobacterium tuberculosis under hypoxia by inhibiting the autokinase activity of DevS sensor kinase. BMC Microbiol. 2014 Jul 21;14:195. doi: 10.1186/1471-2180-14-195. PubMed PMID: 25048654; PubMed Central PMCID: PMC4110071.

**BACKGROUND:** Two-component systems have emerged as compelling targets for antibacterial drug design for a number of reasons including the distinct histidine phosphorylation property of their constituent sensor kinases. The DevR-DevS/DosT two component system of Mycobacterium tuberculosis (M. tb) is essential for survival under hypoxia, a stress associated with dormancy development in vivo. In the present study a combinatorial peptide phage display library was screened for DevS histidine kinase interacting peptides with the aim of isolating inhibitors of DevR-DevS signaling.

**RESULTS:** DevS binding peptides were identified from a phage display library after three rounds of panning using DevS as bait. The peptides showed sequence similarity with conserved residues in the N-terminal domain of DevR and suggested that they may represent interacting surfaces between DevS and DevR. Two DevR mimetic peptides were found to specifically inhibit DevR-dependent transcriptional activity and restrict the hypoxic survival of M. tb. The mechanism of peptide action is majorly attributed to an inhibition of DevS autokinase activity.

**CONCLUSIONS:** These findings demonstrate that DevR mimetic peptides impede DevS activation and that intercepting DevS activation at an early step in the signaling cascade impairs M. tb survival in a hypoxia persistence model.



PMCID: PMC4110071

PMID: 25048654 [PubMed - in process]

37: Panda SS, Bajpai M, Singh A, Baidya DK, Jana M. Foreign body in the bronchus in children: 22 years experience in a tertiary care paediatric centre. *Afr J Paediatr Surg.* 2014 Jul-Sep;11(3):252-5. doi: 10.4103/0189-6725.137336. PubMed PMID: 25047319.

**Background:** Our objective was to assess types, presentation, duration of symptoms and usefulness of rigid bronchoscopy for diagnosis and treatment of bronchial foreign body (FB) in children. **Materials and Methods:** Records of children with documented FB aspiration treated in Department of Paediatric Surgery from January 1991 to December 2012 were analysed retrospectively. Diagnosis was made on the basis of history, clinical examination, radiological evaluation and bronchoscopy. **Results:** A total of 196 children underwent emergency rigid bronchoscopy for suspected bronchial FB and in 173 cases FB was found. Out of 173 cases, 118 (68.21%) were males and 55 (31.79%) were females. Mean age was 3.7 years (range: 2 months-12 years) while mean duration of symptoms was 28 h (range: from 3 h to 4 months). Most common FB bronchus found was peanut 141 (81.50%). FB was localised to right bronchus in 112 (64.74%) cases while in 44 (25.43%) cases left bronchus was involved. In 17 (9.83%) cases FB was seen at carina only. Cough was the most common presenting symptom in 131 (75.72%) cases. The most common finding in chest X-ray was consolidation-collapse lung or emphysematous lung in 83 (47.97%) cases followed by the flattening of the diaphragm in 17 (9.83%) cases. In 35 (20.23%) cases chest X-ray was found to be normal. Pre-operative endotracheal intubation was done in 13 (7.51%) cases while 20 (11.56%) cases required post-operative mechanical ventilation. **Conclusion:** High index of suspicion should be kept for bronchial FB in children who present with suggestive history of FB ingestion even with normal physical and radiological evaluation.

PMID: 25047319 [PubMed - in process]

38: Panda SS, Bajpai M, Singh A, Jana M, Baidya DK. Effect of surgical techniques on long-term outcome in congenital pouch colon: A tertiary care centre experience. *Afr J Paediatr Surg.* 2014 Jul-Sep;11(3):248-51. doi: 10.4103/0189-6725.137335. PubMed PMID: 25047318.

**Background:** The objective of the following study is to assess effect of a novel surgical technique on long-term outcome in operated cases of congenital pouch colon (CPC). **Patients and Methods:** We retrospectively analysed our surgical neonatal records from June 2002 to May 2012. Out of 477 cases of anorectal malformations, CPC was found in 73 (15%) cases. Out of 73 cases of CPC, 39 (53.4%) were complete pouch and 34 (46.6%) were incomplete. In addition to invertogram, an erect skiagram was done in all cases to confirm diagnosis. Patients were operated either by single stage pull-through or by staged procedure using conventional abdominoperineal (AP) pull-through or by our new hanging bowel technique. All patients were put on bowel management programme starting 1 month post-surgery until 5 years of life. **Results:** Children presented to us at median age of 2.1 days. Mean weight at time of presentation was 2.74 kg. In our study, group median age at time of initial procedure was 2.7 days. In staged procedures definitive surgery was done after 6 months. Hospital stay in single stage procedure using the hanging bowel technique was 9.7 days while 17.4 days in conventional AP pull-through. Complication rate were high in conventional pull-through when compared to hanging bowel technique as shown by the significant  $P < 0.05$ . **Conclusion:** Our novel surgical technique for pull-through is suitable for both single stage as well as staged pull-through. Bowel enema programme should be an integral part of management of CPC.

PMID: 25047318 [PubMed - in process]

39: Singh A, Bajpai M, Panda SS, Jana M. Complications of peripherally inserted central venous catheters in neonates: Lesson learned over 2 years in a tertiary care centre in India. *Afr J Paediatr Surg.* 2014 Jul-Sep;11(3):242-7. doi: 10.4103/0189-6725.137334. PubMed PMID: 25047317.

Background: The objective of this study was to assess the complications of peripherally inserted central venous catheters (PICC) in neonates admitted to neonatal surgical intensive care unit (NSICU). Patients and Methods: Retrospective analysis of 237 neonates admitted to NSICU from January 2010 to December 2011 was done. Results: Mean age at presentation was 5.8 days and mean weight was 1.94 kg. Mean number of attempts was 1.14, mean duration of insertion 8.4 min and mean duration of patency of catheter 3.14 days. Most common site of catheter insertion was upper extremity (basilic followed by cephalic). Overall complications were seen in 47 (23%) cases. Infectious complications were seen in 22 (10.7%) and non-infectious in 25 (12.2%) cases. Significant correlation existed between non-infective complications and insertion site ( $P = 0.03$ ) and duration of PICC ( $P = 0.04$ ). Conclusion: Precautions should be taken and position must be confirmed during and after PICC insertion to avoid undue complications.

PMID: 25047317 [PubMed - in process]

40: Singh A, Bajpai M, Panda SS, Chand K, Jana M, Ali A. Oesophageal foreign body in children: 15 years experience in a tertiary care paediatric centre. *Afr J Paediatr Surg.* 2014 Jul-Sep;11(3):238-41. doi: 10.4103/0189-6725.137333. PubMed PMID: 25047316.

Background: The objective of this study was to report our experience and outcome in the management of oesophageal foreign body (EFB) in suspected cases of foreign body (FB) ingestion. Materials and Methods: Records of children with documented EFB ingestion treated in the Department of Pediatric surgery from January 1997 to December 2012 were analysed. Diagnosis was made on the basis of history, clinical examination and radiological evaluation. Stronger index of suspicion was kept in cases of sudden onset of symptoms with an inappropriate history of FB ingestion. Results: A total of 317 children underwent emergency rigid oesophagoscopy for EFB. Out of these, 206 were males and 111 were females. The most common EFB found was coins in 209 (65.9%) cases, followed by food bolus obstruction in 54 (17%), metallic FB in 29 (9.1%), plastic FB in 21 (6.6%), and button batteries in 14 (4.4%) cases. The most common site of FB impaction was found to be cricopharynx in 291 (92%) cases. Conclusions: High index of suspicion should be kept for EFB in children who present with unavailable history of FB ingestion. The wait-and-watch policy in cases of FB oesophagus is not always the correct approach, especially when it presents as respiratory distress of sudden onset.

PMID: 25047316 [PubMed - in process]

41: Purohit A, Aggarwal M, Colah RB, Nadkarni AH, Pati HP. A Case of Iron Deficiency Anemia with Co-existing Hb Fontainebleau. *Mediterr J Hematol Infect Dis.* 2014 Jul 1;6(1):e2014051. doi: 10.4084/MJHID.2014.051. eCollection 2014. PubMed PMID: 25045459; PubMed Central PMCID: PMC4103505.

Hb Fontainebleau is a rare alpha chain variant in the Indian population which generates an unknown peak on hemoglobin HPLC study and does cause diagnostic difficulty to those who are not acquainted with this entity. We present a case of Hb Fontainebleau, an eighteen year old patient who presented with symptoms

related to anemia to our department and unknown peak observed in HPLC plots lead us to family study and molecular characterization for this case.

PMCID: PMC4103505

PMID: 25045459 [PubMed]

42: Khokhar S, Sharma R, Patil B, Sinha G, Nayak B, Kinkhabwala RA. A safe technique for in-the-bag intraocular lens implantation in pediatric cataract surgery. *Eur J Ophthalmol*. 2014 Jul 2:0. doi: 10.5301/ejo.5000502. [Epub ahead of print] PubMed PMID: 25044136.

**PURPOSE:** To describe a safe technique for in-the-bag intraocular lens (IOL) implantation in pediatric cataract patients who undergo lens aspiration with primary posterior capsulorhexis and anterior vitrectomy.

**METHODS:** Sixty eyes of 45 consecutive patients with congenital/developmental cataract underwent lens aspiration with primary posterior continuous curvilinear capsulorhexis (PCCC) with anterior vitrectomy and in-the-bag IOL implantation using the described technique of IOL implantation using anterior capsule as support.

**RESULTS:** All eyes had stable IOL at the end of surgery and none of the eyes had lens decentration/dislocation in posterior vitreous.

**CONCLUSIONS:** Implantation of in-the-bag IOL is difficult in children who undergo primary PCCC with anterior vitrectomy. Our technique of implanting IOL by pushing it against the back surface of anterior capsule is a safe method and results in no complications related to faulty IOL implantation.

PMID: 25044136 [PubMed - as supplied by publisher]

43: Kumar G, Dhull VS, Karunanithi S, Bal C, Kumar R. (68)Ga-DOTANOC PET/CT mimicking renal dynamic scan: Lack of physiological uptake in the spleen of a newborn and the pituitary gland in congenital hyperinsulinism. *Rev Esp Med Nucl Imagen Mol*. 2014 Jul 17. pii: S2253-654X(14)00007-9. doi: 10.1016/j.remnm.2013.12.002. [Epub ahead of print] PubMed PMID: 25043776.

PMID: 25043776 [PubMed - as supplied by publisher]

44: Jain S, Karunanithi S, Singla S, Kumar A, Bal C, Kumar R. (18)F-FDG PET/CT in worsening of Primary Sclerosing Cholangitis concomitant with improved Langerhans Cell Histiocytosis. *Rev Esp Med Nucl Imagen Mol*. 2014 Jul 17. pii: S2253-654X(14)00011-0. doi: 10.1016/j.remnm.2013.12.005. [Epub ahead of print] PubMed PMID: 25043775.

PMID: 25043775 [PubMed - as supplied by publisher]

45: Chakraborty PS, Dhull VS, Karunanithi S, Roy SG, Kumar R. Rare case of gall bladder neuroendocrine tumor: (18)F-FDG and (68)Ga-DOTANOC PET/CT findings. *Rev Esp Med Nucl Imagen Mol*. 2014 Jul 17. pii: S2253-654X(13)00190-X. doi: 10.1016/j.remnm.2013.10.009. [Epub ahead of print] PubMed PMID: 25043774.

PMID: 25043774 [PubMed - as supplied by publisher]

46: Naswa N, Karunanithi S, Sharma P, Soundararajan R, Bal C, Kumar R. Pre-operative (68)Ga-DOTANOC somatostatin receptor PET/CT imaging demonstrating multiple synchronous lesions in a patient with head and neck paraganglioma. *Rev Esp Med Nucl Imagen Mol*. 2014 Jul 17. pii: S2253-654X(14)00014-6. doi: 10.1016/j.remn.2013.11.002. [Epub ahead of print] PubMed PMID: 25043773.

Paragangliomas, or glomus tumors, are neoplasms arising from extra-adrenal chromaffin tissue. They frequently cause symptoms by over-production of catecholamines with known predilection to multicentricity. We describe the case of a patient with bilateral carotid body tumor who underwent a preoperative (68)Gallium labeled [1,4,7,10-tetraazacyclododecane-1,4,7,10-tetraacetic acid]-1-NaI3-Octreotide ((68)Ga-DOTANOC) positron emission tomography/computed tomography (PET/CT) imaging for staging. This is a unique case in which multiple paraganglioma and pheochromocytoma were demonstrated in a single patient using (68)Ga-DOTANOC PET/CT.

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PMID: 25043773 [PubMed - as supplied by publisher]

47: Agarwal KK, Tripathi M, Karunanithi S, Das CJ, Suri V, Nalwa A. Crossed cerebellar diaschisis in cerebral toxoplasmosis demonstrated on (18)F-FDG PET/CT. *Rev Esp Med Nucl Imagen Mol*. 2014 Jul 17. pii: S2253-654X(14)00119-X. doi: 10.1016/j.remn.2014.04.007. [Epub ahead of print] PubMed PMID: 25043772.

PMID: 25043772 [PubMed - as supplied by publisher]

48: Srivastava PV, Sudhan P, Khurana D, Bhatia R, Kaul S, Sylaja PN, Moonis M, Pandian JD. Telestroke a viable option to improve stroke care in India. *Int J Stroke*. 2014 Jul 18. doi: 10.1111/ijvs.12326. [Epub ahead of print] PubMed PMID: 25042038.

In India, stroke care services are not well developed. There is a need to explore alternative options to tackle the rising burden of stroke. Telemedicine has been used by the Indian Space Research Organization (ISRO) to meet the needs of remote hospitals in India. The telemedicine network implemented by ISRO in 2001 presently stretches to around 100 hospitals all over the country, with 78 remote/rural/district health centers connected to 22 specialty hospitals in major cities, thus providing treatment to more than 25000 patients, which includes stroke patients. Telemedicine is currently used in India for diagnosing stroke patients, subtyping stroke as ischemic or hemorrhagic, and treating accordingly. However, a dedicated telestroke system for providing acute stroke care is needed. Keeping in mind India's flourishing technology sector and leading communication networks, the hub-and-spoke model could work out really well in the upcoming years. Until then, simpler alternatives like smartphones, online data transfer, and new mobile applications like WhatsApp could be used. Telestroke facilities could increase the pool of patients eligible for thrombolysis. But this primary aim of telestroke can be achieved in India only if thrombolysis and imaging techniques are made available at all levels of health care.

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PMID: 25042038 [PubMed - as supplied by publisher]

49: Maitra S, Baidya DK, Bhattacharjee S, Khanna P. Evaluation of i-gel<sup>™</sup> airway in children: a meta-analysis. *Paediatr Anaesth*. 2014 Jul 16. doi:

10.1111/pan.12483. [Epub ahead of print] PubMed PMID: 25041224.

**BACKGROUND:** I-gel™ is a relatively newer addition in the pediatric anesthesia practice. Its comparison with the other laryngeal mask airway reported a wide range of results. Randomized controlled trials where i-gel™ has been compared with other laryngeal masks (laryngeal mask airway ProSeal™ and laryngeal mask airway Classic™) in children for airway management device during general anesthesia has been included in this meta-analysis.

**METHODS:** PubMed and Central Register of Clinical Trials of the Cochrane Collaboration for eligible controlled trials using following search words: 'i-gel', 'i-gel laryngeal mask airway', 'i-gel children', 'i-gel paediatric' until February 15, 2014. A total nine prospective randomized controlled trials have been included in this meta-analysis.

**RESULTS:** Pooled analyses have found that i-gel™ provided significantly higher oropharyngeal leak pressure than laryngeal mask airway ProSeal™ [496 participants, mean difference 2.07 cm H<sub>2</sub>O, 95% CI 0.52-3.62; P = 0.009] and a similar leak in comparison with laryngeal mask airway Classic™ [355 participants, mean difference 1.73 cm H<sub>2</sub>O, 95% CI -0.04, 3.51 cm H<sub>2</sub>O; P = 0.06]. No difference was found in first insertion success rate and ease of insertion between i-gel™, laryngeal mask airway ProSeal™, and laryngeal mask airway Classic™. Ease of gastric tube insertion is similar between i-gel™ and laryngeal mask airway ProSeal™. Reported complications are infrequent and similar in all three devices.

**CONCLUSION:** We conclude that i-gel™ is an effective alternative of the commonly used laryngeal mask airway ProSeal™ and laryngeal mask airway Classic™ in children for airway management during general anesthesia.

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PMID: 25041224 [PubMed - as supplied by publisher]

50: Khanna N, Singh M, Rasool S, Ammini A, Bhatla N, Garg V, Rao S, Bhattacharya SN. Menstrual irregularities, fertility status, and ovarian function in female patients with leprosy in India. *Int J Dermatol*. 2014 Sep;53(9):1114-8. doi: 10.1111/j.1365-4632.2012.05771.x. Epub 2014 Jul 11. PubMed PMID: 25040568.

**BACKGROUND:** Gonadal involvement in males in lepromatous leprosy is not uncommon, but there is a paucity of literature on the involvement of gonads in female patients with leprosy. This study was undertaken to determine if there is any menstrual dysfunction, alteration in fertility status and circulating luteinizing hormone (LH), follicle-stimulating hormone (FSH), prolactin, and estradiol in female patients with paucibacillary (PB) and multibacillary (MB) leprosy.

**MATERIALS AND METHODS:** In a cross-sectional study, 229 patients with leprosy (79 with PB leprosy and 150 with MB leprosy) and 100 age-matched non-leprosy controls were evaluated for menstrual function, fertility status, and circulating sex hormones.

**RESULTS:** Twenty percent of patients with MB leprosy had menstrual irregularities post-dating the onset of leprosy in comparison to 6.3% patients with PB leprosy, and this difference was statistically significant (P < 0.001). However, the fertility profile of patients with PB leprosy was comparable to that of patients with MB leprosy (P > 0.05). A significantly higher number of patients with MB leprosy (9.3%) had elevation of circulating FSH, LH, and prolactin vis-à-vis patients with PB leprosy (1.3%), and this difference was statistically

significant ( $P < 0.05$ ). Similarly, the mean levels of LH, FSH, and prolactin were significantly elevated in patients with MB leprosy vis-à-vis patients with PB leprosy and controls ( $P < 0.05$ ).

**CONCLUSIONS:** Multibacillary leprosy may be associated with menstrual irregularities and elevation of gonadotropin hormones, indicating an ovarian dysfunction.

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PMID: 25040568 [PubMed - in process]

51: Chopra S, Garg A, Ballal S, Bal CS. Lung metastases from differentiated thyroid carcinoma: prognostic factors related to remission and disease-free survival. *Clin Endocrinol (Oxf)*. 2014 Jul 17. doi: 10.1111/cen.12558. [Epub ahead of print] PubMed PMID: 25040494.

**OBJECTIVE:** Distant metastases, although rare, account for maximum disease-related mortality in differentiated thyroid cancer (DTC). Lungs and bones are the most frequent sites of metastases. We sought to identify the prognostic factors in adult DTC patients presenting with pulmonary metastases at initial diagnosis.

**DESIGN:** Retrospective cohort study.

**PATIENTS:** From the medical records of 4370 patients, 200 patients aged more than 21 years who were identified to have pulmonary metastases at the time of diagnosis were included in the analysis.

**RESULTS:** The sites of metastases were lungs alone in 133 (67%) patients, and additional sites in remaining 67 (33%) patients were as follows: bones in 59, liver in 4, brain in 2 and both bone and liver in two patients. During the mean follow-up of 61 months (range, 12-312 months), 76 patients achieved remission, 121 (60.5%) patients had biochemically and/or structurally persistent disease and three patients showed disease progression. Multivariate analysis revealed presence of macro-nodular (chest X-ray positive) pulmonary metastases and concomitant skeletal metastases as independent factors decreasing the likelihood of remission. Of the 76 patients with remission, 16 (21%) developed subsequent recurrence. Patient age >45 years and follicular histopathology were independently associated with greater hazards of developing recurrence.

**CONCLUSION:** This study suggests that the patients with macro-nodular lung metastases and/or concomitant skeletal metastases have reduced odds of achieving remission. Moreover, significant number of patients recur even after complete remission with RAI treatment, hence strict surveillance is recommended especially in patients with age >45 years and/or with follicular histology of DTC.

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PMID: 25040494 [PubMed - as supplied by publisher]

52: Bagchi S, Sachdev SS, Nalwa A, Das C, Sinha S, Suri V, Mahajan S, Bhowmik D, Agarwal S. Multiple intracranial space-occupying lesions in a renal transplant recipient from an area endemic for tuberculosis (TB): TB vs. toxoplasmosis. *Transpl Infect Dis*. 2014 Jul 7. doi: 10.1111/tid.12262. [Epub ahead of print] PubMed PMID: 25040057.

Renal transplant recipients may present with intracranial space-occupying lesions (SOLs) due to infections as well as a post-transplant lymphoproliferative disorder (PTLD). Here, we discuss a renal transplant recipient who presented with

neurologic symptoms and magnetic resonance imaging (MRI) of the brain showed multiple focal SOLs. Tuberculosis (TB), toxoplasmosis, nocardiosis, fungal infections, and PTLD were considered in the differential diagnosis. MRI spectroscopy was suggestive of an infectious cause, such as toxoplasmosis or TB. Serologic tests using Toxoplasma were negative. A brain biopsy followed by immunohistochemical staining using Toxoplasma antibody demonstrated multiple intravascular cysts of toxoplasma. This case highlights the diagnostic dilemma in an immunocompromised patient with multiple focal brain lesions, especially in areas where TB is endemic.

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PMID: 25040057 [PubMed - as supplied by publisher]

53: Kapoor PM, Subramanian A, Malik V, Devagorou V. Perioperative Endothelin Levels in Patients Undergoing Intracardiac Repair for Tetralogy of Fallot. *J Card Surg*. 2014 Jul 14. doi: 10.1111/jocs.12394. [Epub ahead of print] PubMed PMID: 25040048.

**BACKGROUND:** Endothelin, a pro-inflammatory molecule, had been extensively studied in patients with cardiovascular illness. Impact on the perioperative outcome of patients with cyanotic congenital heart defects is still unknown. In the present study, we report perioperative changes in endothelin levels and their correlation with preoperative factors and clinical outcomes in a group of patients with tetralogy of Fallot (TOF) undergoing definitive repair.

**METHODOLOGY:** 167 patients with TOF undergoing intracardiac repair under cardiopulmonary bypass were studied. Endothelin levels were taken at three different points of time and correlated with different clinical variables. **RESULTS:** The baseline endothelin level correlated with patients' nutritional status and degree of cyanosis. The magnitude of inflammatory response in the post-cardiopulmonary bypass (post-CPB) period as measured by endothelin level was much higher and correlated more consistently with adverse clinical outcomes in the younger age group. On multivariable analysis, age at operation, preoperative degree of hypoxemia, and endothelin levels were found to be independent predictors of clinical outcomes.

**CONCLUSIONS:** A rise in serum endothelin levels in patients with TOF undergoing definitive repair on CPB, with preoperative severity of cyanosis, nutritional status, and adverse clinical outcomes. The endothelin levels may be monitored to identify patients with cyanosis at an increased risk of exhibiting augmented inflammatory response to CPB.

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PMID: 25040048 [PubMed - as supplied by publisher]

54: Sharma DN, Joshi NP, Gandhi AK, Haresh KP, Gupta S, Julka PK, Rath GK. High-dose-rate interstitial brachytherapy for T1-T2-stage penile carcinoma: Short-term results. *Brachytherapy*. 2014 Sep-Oct;13(5):481-7. doi: 10.1016/j.brachy.2014.06.003. Epub 2014 Jul 16. PubMed PMID: 25037912.

**PURPOSE:** Interstitial brachytherapy (IBT) is a preferred treatment option over partial penectomy in selected patients with T1-T2-stage penile carcinoma because of its organ preservation ability. Literature is mostly based on the use of low-dose-rate IBT, and experience with high-dose-rate (HDR) IBT is extremely limited. We studied the role of HDR-IBT alone in patients with T1-T2-stage penile

carcinoma.

**METHODS AND MATERIALS:** Between April 2010 and July 2013, 14 patients with T1-T2-stage penile carcinoma were treated with HDR-IBT at our center. Size of the primary lesion ranged from 1.5 to 4.0cm. A two-to-four-plane free-hand implant was performed using plastic catheters. The prescribed dose of HDR-IBT was 42-51Gy in 14-17 fractions using twice-a-day fractionation schedule. Patients were followed up regularly for assessment of local control, survival, toxicity, and sexual function.

**RESULTS:** At a median followup of 22 months, 2 patients developed recurrent disease at locoregional site. The 3-year overall survival was 83% with penis preservation rate of 93%. All patients developed acute Grade III skin toxicity that healed during 6-8-weeks time. Urethral stenosis and soft tissue necrosis was not seen in any of the patients. A total of 4 patients experienced mild asymptomatic fibrosis in the implanted area. Around 10 patients had satisfactory sexual function status at the last followup visit.

**CONCLUSIONS:** Although it was a small sample size, our results have demonstrated excellent local control rate and acceptable toxicity with HDR-IBT in patients with T1-T2-stage penile carcinoma.

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PMID: 25037912 [PubMed - in process]

55: Goyal S, Ambekar A, Ray R. Ketamine dependence in an anesthesiologist: an occupational hazard? *Indian J Psychol Med.* 2014 Jul;36(3):335-7. doi: 10.4103/0253-7176.135395. PubMed PMID: 25035566; PubMed Central PMCID: PMC4100428.

Substance abuse among medical professionals is a cause for concern. Certain psychotropic substances such as ketamine are at easy dispense to anesthesiologists increasing the likelihood of misuse and dependence and raise several issues including safety of patients. We discuss a case demonstrating ketamine dependence in an anesthesiologist from India. The reported psychotropic effects of ketamine ranged from dissociation and depersonalization to psychotic experiences. There was also development of significant tolerance to ketamine without prominent physical withdrawal symptoms and cyclical use of very high doses was observed. Issues related to management of health professionals are also discussed.

PMCID: PMC4100428

PMID: 25035566 [PubMed]

56: Balhara YP, Verma R. A review of web based interventions for managing tobacco use. *Indian J Psychol Med.* 2014 Jul;36(3):226-35. doi: 10.4103/0253-7176.135367. Review. PubMed PMID: 25035543; PubMed Central PMCID: PMC4100405.

Web based interventions (WBIs) have been developed for various health conditions. These include interventions for various psychoactive substance use disorders including tobacco and alcohol. Tobacco use has remained the single largest preventable cause of global mortality and morbidity for many years. It is responsible for around 6 million deaths annually world-wide. Ironically, most of the tobacco users reside in resource poor low and middle-income countries. The article reviews the existing literature on WBIs for management of tobacco use. The literature search was performed using MedLine, PubMed, PsycINFO, Embase and



Cochrane Review for relevant English language articles published from 1998 up to 2013. There is limited support for effectiveness of WBIs for managing tobacco use among adolescents. Although most of the trials among adults found WBIs to be more effective at short term follow-up (a few days to weeks), the benefits failed to extend beyond 3 months in most of the studies. All but one interventions studied in a randomized controlled trial is for smoking forms.

PMCID: PMC4100405

PMID: 25035543 [PubMed]

57: Ahmed NH, Mukherjee A, Samantaray JC, Kar HK. Isolated oral mucosal leishmaniasis. *Indian J Dermatol Venereol Leprol*. 2014 Jul-Aug;80(4):343-5. doi: 10.4103/0378-6323.136915. PubMed PMID: 25035365.

PMID: 25035365 [PubMed - in process]

58: Ramam M. How do I look? *Indian J Dermatol Venereol Leprol*. 2014 Jul-Aug;80(4):283-4. doi: 10.4103/0378-6323.136827. PubMed PMID: 25035349.

PMID: 25035349 [PubMed - in process]

59: Jain S, Sinha S, Sharma SK, Samantaray JC, Aggrawal P, Vikram NK, Biswas A, Sood S, Goel M, Das M, Vishnubhatla S, Khan N. Procalcitonin as a prognostic marker for sepsis: a prospective observational study. *BMC Res Notes*. 2014 Jul 17;7:458. doi: 10.1186/1756-0500-7-458. PubMed PMID: 25034373; PubMed Central PMCID: PMC4105100.

**BACKGROUND:** Procalcitonin is useful for the diagnosis of sepsis but its prognostic value regarding mortality is unclear. This prospective observational study was designed to study the prognostic value of procalcitonin in prediction of 28 day mortality in patients of sepsis. Fifty-four consecutive patients of sepsis, severe sepsis and septic shock defined using the 2001 Consensus Conference SCCM/ESICM/ACCP/ATS/SIS criteria from medical Intensive Care Unit (ICU) of a tertiary care center in New Delhi, India were enrolled from July 2011 to June 2013. Procalcitonin (PCT), C-reactive protein (CRP) measurements were recorded on day 1, day 7 and day 28 of follow up.

**RESULTS:** Procalcitonin value was a better predictor of all-cause short-term mortality than C-reactive protein. Those patients with Procalcitonin levels <7 ng/ml showed higher cumulative survival than those with level [greater than or equal to]7 ng/ml (69.1% vs. 39.5%, p=0.02). No such effect was observed in relation to C-reactive protein. Procalcitonin levels [greater than or equal to]7 ng/ml predicted mortality with a hazard ratio of 2.6(1.1-6.3).

**CONCLUSIONS:** A Procalcitonin value [greater than or equal to]7 ng/ml obtained at the time of admission to the ICU is a predictor of short-term mortality and thus may allow the identification of those septic patients at increased mortality risk, and help improve their treatment.

PMCID: PMC4105100

PMID: 25034373 [PubMed - in process]

60: Khokhar S, Sharma R, Patil B, Aron N, Gupta S. Comparison of new motorized injector vs manual injector for implantation of foldable intraocular lenses on wound integrity: an ASOCT study. *Eye (Lond)*. 2014 Jul 18. doi:

10.1038/eye.2014.162. [Epub ahead of print] PubMed PMID: 25033901.

**Purpose**To compare intraocular lens implantation using a motorized injector vs standard manual injector through a 2.2-mm clear corneal incision.  
**Methods**Patients underwent standard phacoemulsification using a 2.2-mm clear corneal incision. Hydrophobic acrylic aspheric intraocular lens (Acrysof SN60WF intraocular lens (IOL)) was inserted using D cartridge with manual monarch injector or autosert motorized injector. IOL safety, final incision size and wound integrity in terms of anterior and posterior wound gape, and descemet's membrane detachment were compared between the two groups at post-operative day 1 and at 1 month using Anterior Segment Optical Coherence Tomography.  
**Results**The study recruited 32 patients in the group I (manual injector) and 30 patients in group II (motorized injector). In group I, the final incision after IOL insertion increased by 0.12mm (95% CI: 0.134-0.106) ( $P < 0.0001$ ), which was seen in 100% of the patients. In group II, the incision enlarged by 0.01 (95% CI: 0.021-0.001) ( $P = 0.07$ ) and was seen in only 6.67% of the cases. IOL nicks were seen in 9.37% of the cases in group I only. Although the incidence of descemet's membrane detachment and anterior wound gape was similar for both groups, posterior wound gape was seen more often with the manual injector in the immediate post-operative period. ( $P = 0.018$ )  
**Conclusion**The motorized insertion system was gentle and safe for the IOLs with lesser incidence of IOL nicks. Regarding wound safety, it caused significantly less incision enlargement and better posterior wound integrity.  
**Eye advance online publication, 18 July 2014; doi:10.1038/eye.2014.162.**

PMID: 25033901 [PubMed - as supplied by publisher]

61: Kapil U, Pandey RM, Prakash S, Sareen N, Bhadoria AS. Iodine deficiency status amongst school children in pauri, uttarakhand. Indian Pediatr. 2014 Jul 8;51(7):569-70. PubMed PMID: 25031137.

**OBJECTIVE:** To assess the iodine deficiency status amongst school age children in district Pauri, Uttarakhand.

**METHODS:** 2067 children (age of 6-12 years) were included. Clinical examination of thyroid gland of each child was conducted. On-the-spot urine and salt samples were collected from children.

**RESULTS:** Total Goitre Rate was found to be 16.8% and median Urinary Iodine Concentration level was 115 µg/L. Only 40.4% of salt samples had e 15 ppm of iodine.

**CONCLUSION:** There is a mild degree of iodine deficiency in school age children in district Pauri. There is a need of strengthening the National Iodine Deficiency Disorder Control Program.

PMID: 25031137 [PubMed - in process]

62: Sharma P, Naswa N, Kc SS, Alvarado LA, Dwivedi AK, Yadav Y, Kumar R, Ammini AC, Bal C. Comparison of the prognostic values of (68)Ga-DOTANOC PET/CT and (18)F-FDG PET/CT in patients with well-differentiated neuroendocrine tumor. Eur J Nucl Med Mol Imaging. 2014 Jul 17. [Epub ahead of print] PubMed PMID: 25030618.

**PURPOSE:** To determine the prognostic value of (68)Ga-DOTANOC PET/CT in patients with well-differentiated neuroendocrine tumor (NET), and to compare the prognostic value with that of (18)F-FDG PET/CT and other conventional clinicopathological prognostic factors.

**METHODS:** Data from 37 consecutive patients (age  $46.6 \pm 13.5$  years, 51 % men) with well-differentiated NET who underwent (68)Ga-DOTANOC PET/CT and (18)F-FDG PET/CT were analyzed. All patients underwent a baseline visit with laboratory and radiological examinations. Clinical and imaging follow-up was performed in all patients. Progression-free survival (PFS) was measured from the date of the first PET/CT scan to the first documentation of progression of disease.

**RESULTS:** (68)Ga-DOTANOC PET/CT was positive in 37 of the 37 patients and (18)F-FDG PET/CT was positive in 21. During follow-up 10 patients (27 %) showed progression of disease and 27 (73 %) showed no progression (24 stable disease, 3 partial response). The median follow-up was 25 months (range 2 - 52 months). Among the variables evaluated none was significantly different between the progressive disease and nonprogressive disease groups, with only SUVmax on (68)Ga-DOTANOC PET/CT being borderline significant ( $P=0.073$ ). In the univariate analysis for PFS outcome, SUVmax on (68)Ga-DOTANOC PET/CT (HR 0.122, 95 % CI 0.019 - 0.779;  $P=0.026$ ) and histopathological tumor grade (HR 4.238, 95 % CI 1.058 - 16.976;  $P=0.041$ ) were found to be associated with PFS. Other factors including age, sex, primary site, Ki-67 index, TNM stage, (18)F-FDG PET/CT status (positive/negative), SUVmax on (18)F-FDG PET/CT and type of treatment were not significant. In multivariable analysis, only SUVmax on (68)Ga-DOTANOC PET/CT was found to be an independent positive predictor of PFS (HR 0.122, 95 % CI 0.019 - 0.779;  $P=0.026$ ).

**CONCLUSION:** SUVmax measured on (68)Ga-DOTANOC PET/CT is an independent, positive prognostic factor in patients with well-differentiated NET and is superior to SUVmax on (18)F-FDG PET/CT and conventional clinicopathological factors for predicting PFS.

PMID: 25030618 [PubMed - as supplied by publisher]

63: Sinha A, Saha A, Kumar M, Sharma S, Afzal K, Mehta A, Kalaivani M, Hari P, Bagga A. Extending initial prednisolone treatment in a randomized control trial from 3 to 6 months did not significantly influence the course of illness in children with steroid-sensitive nephrotic syndrome. *Kidney Int.* 2014 Jul 16. doi: 10.1038/ki.2014.240. [Epub ahead of print] PubMed PMID: 25029428.

While studies show that prolonged initial prednisone therapy reduces the frequency of relapses in nephrotic syndrome, they lack power and have risk of bias. In order to examine the effect of prolonged therapy on frequency of relapses, we conducted a blinded, 1:1 randomized, placebo-controlled trial in 5 academic hospitals in India on 181 patients, 1-12 years old, with a first episode of steroid-sensitive nephrotic syndrome. Following 12 weeks of standard therapy, in random order, 92 patients received tapering prednisolone while 89 received matching-placebo on alternate days for the next 12 weeks. On intention-to-treat analyses, primary outcome of number of relapses at 1 year was 1.26 in the 6-month group and 1.54 in the 3-month group (difference -0.28; 95% confidence interval (CI) -0.75, 0.19). Relative relapse rate for 6- vs. 3-month therapy, adjusted for gender, age, and time to initial remission, was 0.70 (95% CI 0.47-1.10). Similar proportions of patients had sustained remission, frequent relapses, and adverse effects due to steroids. Adjusted hazard ratios for first relapse and frequent relapses with prolonged therapy were 0.57 (95% CI, 0.36-1.07) and 1.01 (95% CI, 0.61-1.67), respectively. Thus, extending initial prednisolone treatment from 3 to 6 months does not influence the course of illness in children with nephrotic syndrome. These findings have implications for guiding the duration of therapy of nephrotic syndrome. *Kidney International* advance online publication, 16 July 2014; doi:10.1038/ki.2014.240.

PMID: 25029428 [PubMed - as supplied by publisher]

64: Sahoo J, Mitra S, Nayak PK, Kamalanathan S. Comment on Prediction of Neonates' Macrosomia with Maternal Lipid Profile of Healthy Mothers by Mossayebi et al. *Pediatr Neonatol*. 2014 Jul 12. pii: S1875-9572(14)00098-9. doi: 10.1016/j.pedneo.2014.04.006. [Epub ahead of print] PubMed PMID: 25026906.

PMID: 25026906 [PubMed - as supplied by publisher]

65: Stewart RA, Szalewska D, She L, Lee KL, Drazner MH, Lubiszewska B, Kosevic D, Ruengsakulrach P, Nicolau JC, Coutu B, Choudhary SK, Mark DB, Cleland JG, Piña IL, Velazquez EJ, Rynkiewicz A, White H. Exercise Capacity and Mortality in Patients With Ischemic Left Ventricular Dysfunction Randomized to Coronary Artery Bypass Graft Surgery or Medical Therapy: An Analysis From the STICH Trial (Surgical Treatment for Ischemic Heart Failure). *JACC Heart Fail*. 2014 Aug;2(4):335-43. doi: 10.1016/j.jchf.2014.02.009. Epub 2014 Jul 9. PubMed PMID: 25023813; PubMed Central PMCID: PMC4127151.

**OBJECTIVES:** The objective of this study was to assess the prognostic significance of exercise capacity in patients with ischemic left ventricular (LV) dysfunction eligible for coronary artery bypass graft surgery (CABG).

**BACKGROUND:** Poor exercise capacity is associated with mortality, but it is not known how this influences the benefits and risks of CABG compared with medical therapy.

**METHODS:** In an exploratory analysis, physical activity was assessed by questionnaire and 6-min walk test in 1,212 patients before randomization to CABG (n = 610) or medical management (n = 602) in the STICH (Surgical Treatment for Ischemic Heart Failure) trial. Mortality (n = 462) was compared by treatment allocation during 56 months (interquartile range: 48 to 68 months) of follow-up for subjects able (n = 682) and unable (n = 530) to walk 300 m in 6 min and with less (Physical Ability Score [PAS] >55, n = 749) and more (PAS ≤55, n = 433) limitation by dyspnea or fatigue.

**RESULTS:** Compared with medical therapy, mortality was lower for patients randomized to CABG who walked ≥300 m (hazard ratio [HR]: 0.77; 95% confidence interval [CI]: 0.59 to 0.99; p = 0.038) and those with a PAS >55 (HR: 0.79; 95% CI: 0.62 to 1.01; p = 0.061). Patients unable to walk 300 m or with a PAS ≤55 had higher mortality during the first 60 days with CABG (HR: 3.24; 95% CI: 1.64 to 6.83; p = 0.002) and no significant benefit from CABG during total follow-up (HR: 0.95; 95% CI: 0.75 to 1.19; p = 0.626; interaction p = 0.167).

**CONCLUSIONS:** These observations suggest that patients with ischemic left ventricular dysfunction and poor exercise capacity have increased early risk and similar 5-year mortality with CABG compared with medical therapy, whereas those with better exercise capacity have improved survival with CABG. (Comparison of Surgical and Medical Treatment for Congestive Heart Failure and Coronary Artery Disease [STICH]; NCT00023595).

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PMCID: PMC4127151 [Available on 2015/8/1]

PMID: 25023813 [PubMed - in process]

66: Prabhakar H, Singh GP, Anand V, Kalavani M. Mannitol versus hypertonic saline for brain relaxation in patients undergoing craniotomy. *Cochrane Database*

Syst Rev. 2014 Jul 16;7:CD010026. doi: 10.1002/14651858.CD010026.pub2. PubMed  
PMID: 25019296.

**BACKGROUND:** Patients with brain tumour usually suffer from increased pressure in the skull due to swelling of brain tissue. A swollen brain renders surgical removal of the brain tumour difficult. To ease surgical tumour removal, measures are taken to reduce brain swelling, often referred to as brain relaxation. Brain relaxation can be achieved with intravenous fluids such as mannitol or hypertonic saline. This review was conducted to find out which of the two fluids may have a greater impact on brain relaxation.

**OBJECTIVES:** The objective of this review was to compare the effects of mannitol versus those of hypertonic saline on intraoperative brain relaxation in patients undergoing craniotomy.

**SEARCH METHODS:** We searched the Cochrane Central Register of Controlled Trials (CENTRAL) (2013, Issue 10), MEDLINE via Ovid SP (1966 to October 2013) and EMBASE via Ovid SP (1980 to October 2013). We also searched specific websites, such as [www.indmed.nic.in](http://www.indmed.nic.in), [www.cochrane-sadcct.org](http://www.cochrane-sadcct.org) and [www.Clinicaltrials.gov](http://www.Clinicaltrials.gov).

**SELECTION CRITERIA:** We included randomized controlled trials (RCTs) that compared the use of hypertonic saline versus mannitol for brain relaxation. We also included studies in which any other method used for intraoperative brain relaxation was compared with mannitol or hypertonic saline. Primary outcomes were longest follow-up mortality, Glasgow Outcome Scale score at three months and any adverse events related to mannitol or hypertonic saline. Secondary outcomes were intraoperative brain relaxation, intensive care unit (ICU) stay, hospital stay and quality of life.

**DATA COLLECTION AND ANALYSIS:** We used standardized methods for conducting a systematic review, as described by the Cochrane Handbook for Systematic Reviews of Interventions. Two review authors independently extracted details of trial methodology and outcome data from reports of all trials considered eligible for inclusion. All analyses were made on an intention-to-treat basis. We used a fixed-effect model when no evidence was found of significant heterogeneity between studies, and a random-effects model when heterogeneity was likely.

**MAIN RESULTS:** We included six RCTs with 527 participants. Only one RCT was judged to be at low risk of bias. The remaining five RCTs were at unclear or high risk of bias. No trial mentioned the primary outcomes of longest follow-up mortality, Glasgow Outcome Scale score at three months or any adverse events related to mannitol or hypertonic saline. Three trials mentioned the secondary outcomes of intraoperative brain relaxation, hospital stay and ICU stay; quality of life was not reported in any of the trials. Brain relaxation was inadequate in 42 of 197 participants in the hypertonic saline group and in 68 of 190 participants in the mannitol group. The risk ratio for brain bulge or tense brain in the hypertonic saline group was 0.60 (95% confidence interval (CI) 0.44 to 0.83, low-quality evidence). One trial reported ICU and hospital stay. The mean (standard deviation (SD)) duration of ICU stay in the mannitol and hypertonic saline groups was 1.28 (0.5) and 1.25 (0.5) days (P value 0.64), respectively; the mean (SD) duration of hospital stay in the mannitol and hypertonic saline groups was 5.7 (0.7) and 5.7 (0.8) days (P value 1.00), respectively

**AUTHORS' CONCLUSIONS:** From the limited data available on the use of mannitol and hypertonic saline for brain relaxation during craniotomy, it is suggested that hypertonic saline significantly reduces the risk of tense brain during craniotomy. A single trial suggests that ICU stay and hospital stay are comparable with the use of mannitol or hypertonic saline. However, focus on other related important issues such as long-term mortality, long-term outcome, adverse events and quality of life is needed.

PMID: 25019296 [PubMed - in process]

67: Mukherjee A, Sharma P, Karunanithi S, Jain S, Kumar R. Synchronous ovarian carcinoma detected on staging (18)F-FDG PET/CT in a patient of esophageal carcinoma: A rare association. *Rev Esp Med Nucl Imagen Mol.* 2014 Jul 10. pii: S2253-654X(13)00184-4. doi: 10.1016/j.remnm.2013.10.003. [Epub ahead of print] PubMed PMID: 25017383.

PMID: 25017383 [PubMed - as supplied by publisher]

68: Agarwal KK, Sharma P, Kc SS, Bal C, Kumar R. Giant thoracic ganglioneuroma in a pediatric patient: Staging and restaging with (18)F-FDG PET-CT. *Rev Esp Med Nucl Imagen Mol.* 2014 Jul 10. pii: S2253-654X(13)00186-8. doi: 10.1016/j.remnm.2013.10.005. [Epub ahead of print] PubMed PMID: 25017382.

PMID: 25017382 [PubMed - as supplied by publisher]

69: Kumar A, Prasad K, Vivekanandhan S, Srivastava A, Goswami S, Srivastava MV, Tripathi M. Association between angiotensin converting enzyme gene insertion/deletion polymorphism and intracerebral haemorrhage in North Indian population: a case control study and meta-analysis. *Neurol Sci.* 2014 Jul 14. [Epub ahead of print] PubMed PMID: 25016961.

The purpose of this study was to determine the relationship between Angiotensin converting enzyme (ACE) insertion/deletion polymorphism and ICH with an ACE level in a North Indian population. Patient with ICH and age- and sex- matched control subjects were recruited. Case control study design was used. Genotyping was performed by using Polymerase chain reaction. Serum ACE levels were measured by colorimetric method. Our results were integrated with other reported studies across different countries in a meta-analysis. One hundred and six patients with ICH and 106 age- and sex- matched control subjects were recruited. Mean age of cases and control subjects were  $53.4 \pm 1$  and  $52.9 \pm 13.4$ , respectively. The DD genotypes were more frequency distributed in cases compared with controls (OR 2; 95 % CI, 1.02-3.8, P = 0.04) under a recessive model of inheritance. Meta-analysis suggests significant association between ACE I/D polymorphism and risk of ICH (OR 1.98; 95 % CI, 1.53-2.57) under the recessive model of inheritance and under the dominant model of inheritance (OR 1.31; 95 % CI, 1.18-1.45). The findings of the present study show a significant association between ACE insertion/deletion polymorphism and ICH. Meta-analysis indicate that ACE I/D polymorphism may be a susceptible marker for risk factor of ICH in Asian population.

PMID: 25016961 [PubMed - as supplied by publisher]

70: Anand S, Sharma AP, Aggarwal S, Nath D, Mathur S. Asymptomatic intraperitoneal ascariasis: Importance of diagnostic laparoscopy. *J Minim Access Surg.* 2014 Jul;10(3):157-8. doi: 10.4103/0972-9941.134881. PubMed PMID: 25013334; PubMed Central PMCID: PMC4083550.

Migration of *Ascaris* from intestine into peritoneal cavity is rare and usually presents as acute abdomen. We report a case of 41-year-old male who was admitted for laparoscopic mesh rectopexy for rectal prolapse. During the initial laparoscopy, purulent fluid was seen in pelvis. A complete diagnostic laparoscopy was done. An omental nodule was found, which was excised and extracted in a bag. On histopathology, the omental nodule revealed gravid *Ascaris lumbricoides*.

PMCID: PMC4083550

PMID: 25013334 [PubMed]

71: Chaudhry R, Valavane A, Mohan A, Dey AB. Legionella pneumophila infection associated with renal failure causing fatality in a known case of sarcoidosis. Indian J Med Microbiol. 2014 Jul-Sep;32(3):324-7. doi: 10.4103/0255-0857.136590. PubMed PMID: 25008831.

Legionella pneumophila infection may become fatal in immunocompromised state. We report here the first known fatal case from India due to Legionella pneumophila infection complicated by renal failure in a patient undergoing treatment for Sarcoidosis. Sarcoidosis is an idiopathic systemic inflammatory disease involving multiple organs. Urine antigen detection and polymerase chain reaction targeting 16S rRNA gene could help in rapid diagnosis of the infection and thereby start specific therapy. Clinical awareness along with availability of rapid diagnostic tests and institution of specific therapy may reduce morbidity and mortality associated with this infection especially in immunocompromised state.

PMID: 25008831 [PubMed - in process]

72: Lalwani S, Mathur P, Tak V, Janani S, Kumar SI, Bagla R, Misra MC. Diagnosis of ventilator-associated pneumonia: comparison between ante-mortem and post-mortem cultures in trauma patients. Indian J Med Microbiol. 2014 Jul-Sep;32(3):294-300. doi: 10.4103/0255-0857.136572. PubMed PMID: 25008824.

**PURPOSE:** To evaluate the diagnostic utility of ante-mortem tracheal aspirates for diagnosis of ventilator-associated pneumonia (VAP). Trauma victims represent an otherwise healthy population, who are on multiple invasive life-support devices, which predispose them to severe infections like VAP. The diagnosis of VAP is challenging, due to the difficulty in obtaining a representative sample from lungs. We studied the diagnostic utility of tracheal aspirates by comparing its results with the post-mortem lung cultures.

**MATERIALS AND METHODS:** A total of 106 fatal trauma patients were included in the study. Lung samples and cardiac blood were taken for culture at the time of autopsy. The results of ante-mortem and post-mortem cultures were compared.

**RESULTS:** Septicemia was the cause of death in 51 (48%) of the fatal cases and VAP was identified in 36 (34%) cases. A total of 96 (90.5%) cases had pathogens isolated from lung samples. In 62 (58%) cases, the same organism was isolated from ante-mortem and post-mortem respiratory samples.

**CONCLUSIONS:** Culture results of a properly collected tracheal aspirate should be taken into consideration along with Centre for Disease Control and Prevention (CDC's) diagnostic criteria to maximise the diagnosis of VAP.

PMID: 25008824 [PubMed - in process]

73: Rosenberg J, Bauchner H, Backus J, De Leeuw P, Drazen J, Frizelle F, Godlee F, Haug C, James A, Laine C, Reyes H, Sahni P, Zhaori G. The New ICMJE Recommendations. Indian J Med Microbiol. 2014 Jul-Sep;32(3):219-20. doi: 10.4103/0255-0857.136545. PubMed PMID: 25008810.

PMID: 25008810 [PubMed - in process]

74: Panigrahi MK, Manju R, Kumar SV, Toi PC. Pulmonary Mucormycosis Presenting as Nonresolving Pneumonia in a Patient With Diabetes Mellitus. Respir Care. 2014 Jul

8. pii: respicare.03205. [Epub ahead of print] PubMed PMID: 25006269.

PMID: 25006269 [PubMed - as supplied by publisher]

75: Murad MH, Montori VM, Ioannidis JP, Jaeschke R, Devereaux PJ, Prasad K, Neumann I, Carrasco-Labra A, Agoritsas T, Hatala R, Meade MO, Wyer P, Cook DJ, Guyatt G. How to read a systematic review and meta-analysis and apply the results to patient care: users' guides to the medical literature. *JAMA*. 2014 Jul;312(2):171-9. doi: 10.1001/jama.2014.5559. PubMed PMID: 25005654.

Clinical decisions should be based on the totality of the best evidence and not the results of individual studies. When clinicians apply the results of a systematic review or meta-analysis to patient care, they should start by evaluating the credibility of the methods of the systematic review, ie, the extent to which these methods have likely protected against misleading results. Credibility depends on whether the review addressed a sensible clinical question; included an exhaustive literature search; demonstrated reproducibility of the selection and assessment of studies; and presented results in a useful manner. For reviews that are sufficiently credible, clinicians must decide on the degree of confidence in the estimates that the evidence warrants (quality of evidence). Confidence depends on the risk of bias in the body of evidence; the precision and consistency of the results; whether the results directly apply to the patient of interest; and the likelihood of reporting bias. Shared decision making requires understanding of the estimates of magnitude of beneficial and harmful effects, and confidence in those estimates.

PMID: 25005654 [PubMed - indexed for MEDLINE]

76: Satyarthee GD. Commentary. *J Neurosci Rural Pract*. 2014 Jul;5(3):309-10. PubMed PMID: 25002786; PubMed Central PMCID: PMC4078631.

PMCID: PMC4078631

PMID: 25002786 [PubMed]

77: Kumar S. A patient with pycnodysostosis presenting with seizures and porencephalic cysts. *J Neurosci Rural Pract*. 2014 Jul;5(3):284-6. doi: 10.4103/0976-3147.133606. PubMed PMID: 25002775; PubMed Central PMCID: PMC4078620.

Pycnodysostosis is a rare autosomal recessive disorder caused by mutations in the cysteine protease Cathepsin K gene located on chromosome 1q21. It has a well characterized skeletal phenotype which include short stature, generalized increased bone density with propensity of fractures, open calvarial sutures and fontanelle, dental abnormalities, obtuse mandibular angle, resorption of lateral end of clavicle, acro-osteolysis, and in some cases visceromegaly. Central nervous system involvement is very rare and porencephalic cysts has been reported only once, the cause being hypothesised to be an imbalance between the growing brain, its vascular supply and intraventricular fluid pressure. We had a patient with bilateral frontal lobe porencephalic cysts; the patient presenting with complex partial seizures. Cathepsins have been found to be involved in neurological diseases and role of proteases has been well established in gliosis.

PMCID: PMC4078620

PMID: 25002775 [PubMed]

78: Mukherjee A, Karunanithi S, Bal C, Kumar R. 68Ga DOTANOC PET/CT Aiding in the



Diagnosis of Von Hippel-Lindau Syndrome by Detecting Cerebellar Hemangioblastoma and Adrenal Pheochromocytoma. Clin Nucl Med. 2014 Jul 3. [Epub ahead of print] PubMed PMID: 24999687.

A 35-year-old man with clinical suspicion of adrenal pheochromocytoma was evaluated using Ga DOTANOC PET/CT. PET/CT demonstrated Ga DOTANOC-avid right adrenal mass and cerebellar lesion, raising the suspicion of adrenal pheochromocytoma with cerebellar hemangioblastoma suggesting von Hippel-Lindau (VHL) syndrome. Cerebellar lesion on further evaluation with MRI was suggestive of cerebellar hemangioblastoma. Surgical resection of the adrenal mass revealed pheochromocytoma, and genetic analysis revealed mutation involving the chromosome 3p, confirming the diagnosis of VHL syndrome. Ga DOTANOC PET/CT in our patient helped in the diagnosis of VHL syndrome and changed the disease management.

PMID: 24999687 [PubMed - as supplied by publisher]

79: Karunanithi S, Jain TK, Singh A, Bal C, Kumar R. 18F-FDG PET/CT in a Seldom Case of Primary Duodenal Dermatofibrosarcoma Protuberans With Lung and Skeletal Metastases. Clin Nucl Med. 2014 Jul 3. [Epub ahead of print] PubMed PMID: 24999683.

Dermatofibrosarcoma protuberans (DFSP) is an uncommon cutaneous soft tissue sarcoma tumor that arises from the dermis of the skin. Sarcomas of the intestines are rare, and a DFSP arising from the small intestine is a very rare occurrence. Here we present F-FDG PET/CT imaging findings of a 60-year-old man with DFSP in the duodenum with metastases to the lung, mesentery, and skeleton.

PMID: 24999683 [PubMed - as supplied by publisher]

80: Jha P, Pia Patric IR, Shukla S, Pathak P, Pal J, Sharma V, Thinagararanjan S, Santosh V, Suri V, Sharma MC, Arivazhagan A, Suri A, Gupta D, Somasundaram K, Sarkar C. Genome-wide methylation profiling identifies an essential role of reactive oxygen species in pediatric glioblastoma multiforme and validates a methylome specific for H3 histone family 3A with absence of G-CIMP/isocitrate dehydrogenase 1 mutation. Neuro Oncol. 2014 Jul 4. pii: noul13. [Epub ahead of print] PubMed PMID: 24997139.

BACKGROUND: Pediatric glioblastoma multiforme (GBM) is rare, and there is a single study, a seminal discovery showing association of histone H3.3 and isocitrate dehydrogenase (IDH)1 mutation with a DNA methylation signature. The present study aims to validate these findings in an independent cohort of pediatric GBM, compare it with adult GBM, and evaluate the involvement of important functionally altered pathways.

METHODS: Genome-wide methylation profiling of 21 pediatric GBM cases was done and compared with adult GBM data (GSE22867). We performed gene mutation analysis of IDH1 and H3 histone family 3A (H3F3A), status evaluation of glioma cytosine-phosphate-guanine island methylator phenotype (G-CIMP), and Gene Ontology analysis. Experimental evaluation of reactive oxygen species (ROS) association was also done.

RESULTS: Distinct differences were noted between methylomes of pediatric and adult GBM. Pediatric GBM was characterized by 94 hypermethylated and 1206 hypomethylated cytosine-phosphate-guanine (CpG) islands, with 3 distinct clusters, having a trend to prognostic correlation. Interestingly, none of the pediatric GBM cases showed G-CIMP/IDH1 mutation. Gene Ontology analysis identified ROS association in pediatric GBM, which was experimentally validated.

H3F3A mutants (36.4%; all K27M) harbored distinct methylomes and showed enrichment of processes related to neuronal development, differentiation, and cell-fate commitment.

**CONCLUSIONS:** Our study confirms that pediatric GBM has a distinct methylome compared with that of adults. Presence of distinct clusters and an H3F3A mutation-specific methylome indicate existence of epigenetic subgroups within pediatric GBM. Absence of IDH1/G-CIMP status further indicates that findings in adult GBM cannot be simply extrapolated to pediatric GBM and that there is a strong need for identification of separate prognostic markers. A possible role of ROS in pediatric GBM pathogenesis is demonstrated for the first time and needs further evaluation.

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PMID: 24997139 [PubMed - as supplied by publisher]

81: Das S, Irpachi K, Kalra R, Airan B. Aortopulmonary window and double outlet right ventricle: a rare combination. *Ann Card Anaesth*. 2014 Jul-Sep;17(3):245-6. doi: 10.4103/0971-9784.135887. PubMed PMID: 24994739.

PMID: 24994739 [PubMed - in process]

82: Singh SP, Chauhan S, Choudhury M, Malik V, Talwar S, Hote MP, Devagourou V. Modified Blalock Taussig shunt: comparison between neonates, infants and older children. *Ann Card Anaesth*. 2014 Jul-Sep;17(3):191-7. doi: 10.4103/0971-9784.135847. PubMed PMID: 24994729.

**OBJECTIVE:** The aim was to compare various pre-and post-operative parameters and to identify the predictors of mortality in neonates, infants, and older children undergoing Modified Blalock Taussig shunt (MBTS).

**MATERIALS AND METHODS:** Medical records of 134 children who underwent MBTS over a period of 2 years through thoracotomy were reviewed. Children were divided into three groups-neonates, infants, and older children. For analysis, various pre-and post-operative variables were recorded, including complications and mortality.

**RESULTS:** The increase in PaO<sub>2</sub> and SaO<sub>2</sub> levels after surgery was similar and statistically significant in all the three groups. The requirement of adrenaline, duration of ventilation and mortality was significantly higher in neonates. The overall mortality and infant mortality was 4.5% and 8%, respectively.

**CONCLUSION:** Neonates are at increased risk of complications and mortality compared with older children. Age (<30 days), weight (<3 kg), packed red blood cells transfusion >6 ml/kg, mechanical ventilation >24 h and post shunt increase in PaO<sub>2</sub> (P Diff) <25% of baseline PaO<sub>2</sub> are independent predictors of mortality in children undergoing MBTS.

PMID: 24994729 [PubMed - in process]

83: Neema PK. My journey as chief editor and future vision. *Ann Card Anaesth*. 2014 Jul-Sep;17(3):179-81. doi: 10.4103/0971-9784.135838. PubMed PMID: 24994727.

PMID: 24994727 [PubMed - in process]

84: Sharma J, Garg PK, Jain D, Bakshi S, Pandey D. Primary Hodgkin's Disease of the Common Bile Duct: a Case Report and Review of Literature. *J Gastrointest Cancer*. 2014 Jul 4. [Epub ahead of print] PubMed PMID: 24994121.

PMID: 24994121 [PubMed - as supplied by publisher]

85: Chandra S, Narang R, Sreenivas V, Bhatia J, Saluja D, Srivastava K. Association of angiotensin II type 1 receptor (A1166C) gene polymorphism and its increased expression in essential hypertension: a case-control study. *PLoS One*. 2014 Jul 3;9(7):e101502. doi: 10.1371/journal.pone.0101502. eCollection 2014. PubMed PMID: 24992666; PubMed Central PMCID: PMC4081645.

**OBJECTIVES:** Hypertension is one of the major cardiovascular diseases. It affects nearly 1.56 billion people worldwide. The present study is about a particular genetic polymorphism (A1166C), gene expression and protein expression of the angiotensin II type I receptor (AT1R) (SNP ID: rs5186) and its association with essential hypertension in a Northern Indian population.

**METHODS:** We analyzed the A1166C polymorphism and expression of AT1R gene in 250 patients with essential hypertension and 250 normal healthy controls.

**RESULTS:** A significant association was found in the AT1R genotypes (AC+CC) with essential hypertension ( $\chi^2=22.48$ ,  $p=0.0001$ ). Individuals with CC genotypes were at 2.4 times higher odds ( $p=0.0001$ ) to develop essential hypertension than individuals with AC and AA genotypes. The statistically significant intergenotypic variation in the systolic blood pressure was found higher in the patients with CC ( $169.4\pm 36.3$  mmHg) as compared to that of AA ( $143.5\pm 28.1$  mmHg) and AC ( $153.9\pm 30.5$  mmHg) genotypes ( $p=0.0001$ ). We found a significant difference in the average delta-CT value ( $p=0.0001$ ) wherein an upregulated gene expression (approximately 16 fold) was observed in case of patients as compared to controls. Furthermore, higher expression of AT1R gene was observed in patients with CC genotype than with AC and AA genotypes. A significant difference ( $p=0.0001$ ) in the protein expression of angiotensin II Type 1 receptor was also observed in the plasma of patients ( $1.49\pm 0.27$ ) as compared to controls ( $0.80\pm 0.24$ ).

**CONCLUSION:** Our findings suggest that C allele of A1166C polymorphism in the angiotensin II type 1 receptor gene is associated with essential hypertension and its upregulation could play an important role in essential hypertension.

PMCID: PMC4081645

PMID: 24992666 [PubMed - in process]

86: Goyal A, Gupta D, Agarwal R, Bal A, Nijhawan R, Aggarwal AN. Value of different bronchoscopic sampling techniques in diagnosis of sarcoidosis: a prospective study of 151 patients. *J Bronchology Interv Pulmonol*. 2014 Jul;21(3):220-6. doi: 10.1097/LBR.0000000000000081. PubMed PMID: 24992130.

**BACKGROUND:** The exact position of routine bronchoscopic sampling techniques in diagnostic workup of sarcoidosis is often debated. Herein, we ascertain the role of transbronchial needle aspiration (TBNA), endobronchial ultrasound-guided TBNA (EBUS-TBNA), transbronchial lung biopsy (TBLB), and endobronchial biopsy (EBB) in diagnosis of sarcoidosis.

**METHODS:** Consecutive patients with suspected sarcoidosis who underwent fiberoptic bronchoscopy were studied. TBLB, EBB, TBNA, or EBUS-TBNA was performed as

indicated in a standardized manner. A diagnosis of sarcoidosis was established based on the finding of non-necrotizing granulomas or on clinical grounds at 6-month follow-up. Individual and cumulative yield of various procedures and their correlation with clinicoradiologic parameters was analyzed.

**RESULTS:** Of the 164 patients studied, 151 were finally diagnosed as sarcoidosis. Granulomas were demonstrated in 127 (84.2%) patients. Diagnostic yield of TBLB, EBB, TBNA, and EBUS-TBNA was 68.7%, 49.6%, 22.43%, and 57.1%, respectively. Cumulative yields of various procedures were: EBB+TBLB 81.4%; TBLB+TBNA 73.7%; TBNA+EBB 62.9%; TBLB+EBB+TBNA 86.9%; and TBLB+EBB+EBUS-TBNA 86.4%. In those with visible mucosal abnormalities, TBLB+EBB conferred the highest diagnostic yield (92.8%). Clinical findings or radiologic stage had no impact on diagnostic yield.

**CONCLUSIONS:** TBLB is an important tool in bronchoscopic diagnosis of sarcoidosis. If endobronchial abnormalities are seen during bronchoscopy, TBLB with EBB gives the best results otherwise TBLB combined with conventional TBNA and EBB or EBUS-TBNA are required to maximize the diagnostic yield.

PMID: 24992130 [PubMed - in process]

87: Madan K, Mohan A, Ayub II, Jain D, Hadda V, Khilnani GC, Guleria R. Initial Experience with endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA) from a tuberculosis endemic population. *J Bronchology Interv Pulmonol.* 2014 Jul;21(3):208-14. doi: 10.1097/LBR.000000000000080. PubMed PMID: 24992128.

**BACKGROUND:** Endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA) is a widely accepted minimally invasive procedure for the evaluation of mediastinal lymphadenopathy. Most of the published literature on EBUS-TBNA is focused on the diagnostic and staging aspects of lung cancer. Literature on the utility of this modality from developing countries and settings with a high prevalence of tuberculosis (TB) is limited. We herein describe our preliminary experience over 1 year on the utility of EBUS-TBNA from a tertiary care teaching center in North India.

**METHODS:** The primary objective was to evaluate the utility of convex probe EBUS-TBNA as a modality for diagnosis in patients with mediastinal lymphadenopathy presenting to our center. EBUS-TBNA was performed under local anesthesia and conscious sedation in the bronchoscopy laboratory. Rapid on-site evaluation was available for most of the procedures. Patients were discharged the same day from the hospital.

**RESULTS:** A total of 102 patients with mean age of 42.1±14.2 years underwent EBUS-TBNA for a clinical indication of enlarged mediastinal lymph nodes, between September 2012 and September 2013. There were 63 males (61.8%) and 39 females (38.2%). EBUS-TBNA was performed for staging lung cancer in 5 patients. A total of 216 lymph node stations were sampled in 102 patients. Rapid on-site evaluation was performed in 95 patients (93.1%). Adequate/representative samples could be obtained in 98 of 102 patients (96.1%). Overall, EBUS-TBNA was diagnostic in 76 patients (74.5%). EBUS-TBNA was diagnostic in 80.9%, 84.8%, and 75% of patients with sarcoidosis, TB, and lung cancer, respectively. Sensitivity, specificity, positive predictive value, and negative predictive value of EBUS-TBNA were 81.7%, 100%, 100%, and 22.73%, respectively.

**CONCLUSIONS:** EBUS-TBNA is a safe and efficacious procedure for obtaining tissue diagnosis in patients with mediastinal lymph node enlargement. The yield of EBUS-TBNA in diagnosis of mediastinal lymph node enlargement due to TB is especially high.

PMID: 24992128 [PubMed - in process]

88: Khangembam BC, Karunanithi S, Sharma P, Kc SS, Kumar R, Julka PK, Kumar R, Bal C. Perfusion-metabolism coupling in recurrent gliomas: a prospective validation study with (13)N-ammonia and (18)F-fluorodeoxyglucose PET/CT. *Neuroradiology*. 2014 Jul 3. [Epub ahead of print] PubMed PMID: 24989883.

**INTRODUCTION:** We assessed the validity of "perfusion-metabolism coupling" hypothesis in recurrent glioma with (13)N-ammonia ((13)N-NH<sub>3</sub>) PET/CT and (18)F-fluorodeoxyglucose ((18)F-FDG) PET/CT.

**METHODS:** Fifty-six consecutive patients (age, 38.8±12.1 years; 62.5 % males) with histologically proven and previously treated glioma presenting with clinical suspicion of recurrence were prospectively enrolled and evaluated with (13)N-NH<sub>3</sub> PET/CT and (18)F-FDG PET/CT. PET/CT images were evaluated both qualitatively and semiquantitatively. Tumor to white matter uptake ratio (T/W) and tumor to gray matter uptake ratio (T/G) were calculated and analyzed for both the modalities. A combination of clinico-radiological follow-up, repeated imaging, and biopsy (when available) were considered as the reference standard.

**RESULTS:** Based on the reference standard, 27/56 patients had recurrence. (13)N-NH<sub>3</sub> PET/CT and (18)F-FDG PET/CT were concordant in 55/56 patients. Overall sensitivity, specificity, positive predictive value, negative predictive value, and accuracy of (13)N-NH<sub>3</sub>PET/CT were 77.8, 86.2, 84.0, 80.7, and 82.1 %, respectively, and for (18)F-FDG PET/CT were 77.8, 89.7, 87.5, 81.2, and 83.9 %, respectively. There was excellent agreement between results of (13)N-NH<sub>3</sub> PET/CT and (18)F-FDG PET/CT ( $\kappa=0.964$ ;  $P<0.001$ ). The performances of (13)N-NH<sub>3</sub> PET/CT and (18)F-FDG PET/CT were not significantly different between high-grade and low-grade glioma ( $P=1.000$ ). A strong positive correlation was noted between the uptake ratios derived on the two modalities ( $\rho=0.866$ ,  $P<0.001$  for T/W;  $\rho=0.918$ ,  $P<0.001$  for T/G).

**CONCLUSION:** A combination of (13)N-NH<sub>3</sub> PET/CT and (18)F-FDG PET/CT demonstrates that perfusion and metabolism are coupled in recurrent gliomas. These tracers target two different but interrelated aspects of the same pathologic process and can be used as surrogates for each other.

PMID: 24989883 [PubMed - as supplied by publisher]

89: Darlong V, Khanna P, Baidya DK, Chandralekha, Pandey R, Punj J, Kumar R, Sikka K. Perioperative complications of cochlear implant surgery in children. *J Anesth*. 2014 Jul 2. [Epub ahead of print] PubMed PMID: 24986254.

Cochlear implant is a commonly performed surgery for hearing loss in pre-school and school children. However, data on anesthesia management and anesthesia-related complications are sparse. We retrospectively reviewed the data of our institute from January, 2007 to December, 2012. Medical records and anesthesia charts of all the patients who had undergone cochlear implant under general anesthesia between this period were reviewed. Information related to the demographic profile, preoperative evaluation, anesthetic techniques, and perioperative complications were collected and analyzed. A total of 190 patients underwent cochlear implant surgery for pre-lingual (175) and post-lingual (15) deafness. General endotracheal anesthesia with inhalational agents was used in all the cases. Difficult intubation was encountered in three patients. Anesthesia-related complications were laryngospasm at extubation (4.73 %), emergence agitation (2.63 %), and postoperative nausea and vomiting (1.05 %).

Major surgical complications were CSF leak without meningitis (3.15 %), device migration/failure (1.05 %), and flap infection (1.57 %). Cochlear implant under general anesthesia in small children is safe and anesthesia-related complications were minimal. Surgical complications, although more frequent, were predominantly minor and self-limiting.

PMID: 24986254 [PubMed - as supplied by publisher]

90: Gill K, Nigam L, Singh R, Kumar S, Subbarao N, Chauhan SS, Dey S. The rational design of specific peptide inhibitor against p38 $\alpha$  MAPK at allosteric-site: a therapeutic modality for HNSCC. PLoS One. 2014 Jul 1;9(7):e101525. doi: 10.1371/journal.pone.0101525. eCollection 2014. PubMed PMID: 24983631; PubMed Central PMCID: PMC4077802.

p38 $\alpha$  is a significant target for drug designing against cancer. The overproduction of p38 $\alpha$  MAPK promotes tumorigenesis in head and neck squamous cell carcinoma (HNSCC). The ATP binding and an allosteric site referred as DFG are the key sites of the p38 $\alpha$  mitogen activated protein kinase (MAPK) exploited for the design of inhibitors. This study demonstrated design of peptide inhibitor on the basis of allosteric site using Glide molecular docking software and the biochemical analysis of the best modeled peptide. The best fitted tetrapeptide (FWCS) in the allosteric site inhibited the pure recombinant and serum p38 $\alpha$  of HNSCC patients by 74 and 72%, respectively. The potency of the peptide was demonstrated by its IC<sub>50</sub> (4.6 nM) and KD (3.41 $\times$ 10<sup>-10</sup> M) values, determined by ELISA and by surface plasmon resonance (SPR) technology, respectively. The cell viability of oral cancer i.e. KB cell line was reduced in dose dependent manner by 60 and 97% by the treatment of peptide and the IC<sub>50</sub> was 600 and 210  $\mu$ M after 24 and 72 h incubation, respectively. Our result provides an insight for the development of a proficient small peptide as a promising anticancer agent targeting DFG site of p38 $\alpha$  kinase.

PMCID: PMC4077802

PMID: 24983631 [PubMed - in process]

91: Bharosay A, Bharosay VV, Bandyopadhyay D, Sodani A, Varma M, Baruah H. Effect of lipid profile upon prognosis in ischemic and haemorrhagic cerebrovascular stroke. Indian J Clin Biochem. 2014 Jul;29(3):372-6. doi: 10.1007/s12291-013-0372-6. Epub 2013 Aug 31. PubMed PMID: 24966489; PubMed Central PMCID: PMC4062664.

Stroke is the third major cause of death worldwide. Elevated plasma concentration of low density lipoproteins and low plasma concentration of high density lipoprotein concentration are associated with an increased risk of atherosclerosis and coronary heart disease but the relation between serum lipids, and cerebrovascular disease is less clear. The aim of this study was to investigate the reliability and accuracy of serum lipid profile in assessing the prognosis/neurological worsening in patients with ischemic and hemorrhagic cerebrovascular stroke. The subjects in the present study comprised of 101 healthy controls and 150 cerebrovascular stroke patients (including 90 with ischemic stroke and 60 with intracerebral hemorrhagic stroke). In both the groups fasting lipid profile was determined within 72 h of the stroke. A statistically significant association was observed (p < 0.001) between the parameters of lipid profile of cases and healthy controls, and also with the prognosis of the stroke.

PMCID: PMC4062664 [Available on 2015/7/1]

PMID: 24966489 [PubMed]

92: Goyal R, Kumar A, Singhai M. Study of metabolic syndrome and its risk components in patients attending tertiary care center of uttarakhand. *Indian J Clin Biochem.* 2014 Jul;29(3):362-6. doi: 10.1007/s12291-013-0366-4. Epub 2013 Jul 28. PubMed PMID: 24966487; PubMed Central PMCID: PMC4062672.

Metabolic syndrome is a complex of metabolic factors which includes central obesity, insulin-resistance, dyslipidemia and hypertension. Metabolic syndrome is associated with increased risk of cardiovascular disease. This study aimed to know the rate of metabolic syndrome in outpatients presenting to medicine department of our hospital and their profile. The metabolic syndrome was diagnosed using International Diabetes Federation criteria. The parameters analyzed included age, sex, blood pressure, BMI, fasting plasma glucose, HDL and triglycerides. The rate of metabolic syndrome was 21.1 % in our study. The younger population was most susceptible to metabolic derangements. Further, females were found to be affected more than males. The extremely significant parameters were deranged fasting plasma glucose, HDL, triglycerides while hypertension was found to be insignificant. Being overweight maybe a strong predictor for presence of metabolic syndrome in our region of study, and all overweight persons should be assessed and appropriately treated to prevent future cardiovascular events.

PMCID: PMC4062672 [Available on 2015/7/1]  
PMID: 24966487 [PubMed]

93: Garg R, Agarwala S, Bakhshi S, Srinivas M, Bajpai M, Gupta DK, Bhatnagar V. Sacrococcygeal malignant germ cell tumor (SC-MGCT) with intraspinal extension. *J Pediatr Surg.* 2014 Jul;49(7):1113-5. doi: 10.1016/j.jpedsurg.2013.11.063. Epub 2013 Nov 28. PubMed PMID: 24952799.

**BACKGROUND:** Neurological involvement due to intraspinal extension in sacrococcygeal malignant germ cell tumors (SC-MGCTs) has rarely been reported. **AIM:** To evaluate the incidence, presentation, management and the outcome of patients of SC-MGCT with intraspinal extension.

**MATERIALS AND METHODS:** Case records of all cases of SC-MGCT from 2001 to 2008, were reviewed to identify cases with vertebral involvement and intraspinal extension. They were evaluated in terms of their presentation, response to therapy, extent of surgical resection, recovery of neurological symptoms and outcome.

**RESULTS:** Of the 31 cases of SC-MGCT, 5 (16%) had intraspinal extension. Age ranged from 12 to 84 months (median 24 months). Four patients had Altman type 4 disease (stage 4) and 1 had Altman type 3 (stage 3) disease. The intraspinal extension in all patients was detected on contrast CT scan. Patients presented with neurological symptoms in the form of lower limb paresis (80%), bowel and bladder (20%) incontinence. All the tumors responded to pre-operative chemotherapy. Gross complete local resection could be achieved in 4(80%). Neurological recovery was complete in all except for persisting neurogenic bladder in one. During follow up of 3-32 months, all were alive with no recurrence.

**CONCLUSIONS:** SC-MGCT presenting with neurological deficits due to intraspinal extension is usually advanced disease. These patients respond to chemotherapy and surgical resection and most have complete neurological improvement.

PMID: 24952799 [PubMed - in process]

94: Sharma P, Mukherjee A, Karunanithi S, Bal C, Kumar R. Potential role of 18F-FDG PET/CT in patients with fungal infections. *AJR Am J Roentgenol*. 2014 Jul;203(1):180-9. doi: 10.2214/AJR.13.11712. Review. PubMed PMID: 24951213.

OBJECTIVE: Combined anatomic and functional imaging with (18)F-FDG PET/CT is slowly gaining foothold in the management of various infective pathologic abnormalities. However, limited literature is available regarding the role of FDG PET/CT in patients with fungal infections.

CONCLUSION: Here, we briefly review the available literature and highlight the potential role that FDG PET/CT can play in the diagnosis and management of fungal infections.

PMID: 24951213 [PubMed - indexed for MEDLINE]

95: Sharma S, Panda A, Jana M, Arora A, Sharma SK. Ophthalmic manifestations of systemic diseases--part 1: phakomatoses, hematologic malignancies, metastases, and histiocytosis. *Curr Probl Diagn Radiol*. 2014 Jul-Aug;43(4):175-85. doi: 10.1067/j.cpradiol.2014.02.002. PubMed PMID: 24948211.

The orbit can be secondarily involved in various systemic conditions. The ophthalmic involvement is often the first clue to the presence of an underlying systemic condition. The ophthalmic involvement in systemic diseases can be either ocular or extraocular. The extent of involvement can be well delineated by imaging modalities like computed tomography and magnetic resonance imaging. In the first part of the article, we provide an overview of systemic diseases affecting the orbit, briefly discuss the modalities for orbital imaging, and discuss the imaging appearances of ophthalmic involvement in (1) phakomatoses, (2) hematologic malignancies, (3) metastases, and (4) histiocytosis. At the end of the 2-part article, we discuss a pattern-based approach and differential diagnosis of orbital lesions in systemic diseases.

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PMID: 24948211 [PubMed - in process]

96: Rao S, Rao S. Decompression as a treatment for odontogenic cystic lesions of the jaw. *J Oral Maxillofac Surg*. 2014 Jul;72(7):1231. doi: 10.1016/j.joms.2014.03.035. PubMed PMID: 24947962.

Comment in

*J Oral Maxillofac Surg*. 2014 Jul;72(7):1231-2.

Comment on

*J Oral Maxillofac Surg*. 2014 Feb;72(2):327-33.

PMID: 24947962 [PubMed - indexed for MEDLINE]

97: Tanwar J, Datta A, Chauhan K, Kumaran SS, Tiwari AK, Kadiyala KG, Pal S, Thirumal M, Mishra AK. Design and synthesis of calcium responsive magnetic resonance imaging agent: Its relaxation and luminescence studies. *Eur J Med Chem*. 2014 Jul 23;82:225-32. doi: 10.1016/j.ejmech.2014.05.046. Epub 2014 May 20. PubMed PMID: 24904969.



Calcium concentration modulation both inside and outside cell is of considerable interest for nervous system function in normal and pathological conditions. MRI has potential for very high spatial resolution at molecular/cellular level. Design, synthesis and evaluation of Gd-DO3A-AME-NPHE, a calcium responsive MRI contrast agent is presented. The probe is comprised of a Gd(3+)-DO3A core coupled to iminoacetate coordinating groups for calcium induced relaxivity switching. In the absence of Ca(2+) ions, inner sphere water binding to the Gd-DO3A-AME-NPHE is restricted with longitudinal relaxivity,  $r_1 = 4.37 \text{ mM}^{-1} \text{ s}^{-1}$  at 4.7 T. However, addition of Ca(2+) triggers a marked enhancement in  $r_1 = 6.99 \text{ mM}^{-1} \text{ s}^{-1}$  at 4.7 T (60% increase). The construct is highly selective for Ca(2+) over competitive metal ions at extracellular concentration. The  $r_1$  is modulated by changes in the hydration number (0.2 to 1.05), which was confirmed by luminescence emission lifetimes of the analogous Eu(3+) complex. T1 phantom images establish the capability of complex of visualizing changes in [Ca(2+)] by MRI.

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PMID: 24904969 [PubMed - in process]

98: Jain S, Karunanithi S, Sharma P, Singla S, Kumar R. Metastases to hernial sac detected on (18)F-FDG PET/CT. Clin Nucl Med. 2014 Jul;39(7):637-9. doi: 10.1097/RLU.0b013e3182a23b0b. PubMed PMID: 24896767.

The presence of primary or metastatic cancer within a hernial sac is uncommon. Based on the anatomical relation of the tumor to the sac, malignant tumors within hernia sac are classified into 3 groups; intrasaccular, saccular, and extrasaccular. We present F-FDG PET/CT images of 2 cases of hernia sac metastasis, one from non-small cell lung cancer and another from infiltrating ductal breast carcinoma. F-FDG PET/CT was useful in these cases for detection of the metastatic lesion within hernial sac and thus in assessment of total disease burden.

PMID: 24896767 [PubMed - in process]

99: Singla S, Singh H, Mukherjee A, Karunanithi S, Bal C, Kumar R. Cervical and thoracic actinomycosis on (18)F-FDG PET/CT. Clin Nucl Med. 2014 Jul;39(7):623-4. doi: 10.1097/RLU.0000000000000449. PubMed PMID: 24873790.

Actinomycosis is a rare chronic granulomatous disease that runs an indolent course, predominantly seen in Asian countries. The present case highlights the findings of F-FDG PET/CT in cervicothoracic actinomycosis imitating lymphoma.

PMID: 24873790 [PubMed - in process]

100: Basu S, Kwee TC, Saboury B, Garino JP, Nelson CL, Zhuang H, Parsons M, Chen W, Kumar R, Salavati A, Werner TJ, Alavi A. FDG PET for diagnosing infection in hip and knee prostheses: prospective study in 221 prostheses and subgroup comparison with combined (111)In-labeled leukocyte/(99m)Tc-sulfur colloid bone marrow imaging in 88 prostheses. Clin Nucl Med. 2014 Jul;39(7):609-15. doi: 10.1097/RLU.0000000000000464. PubMed PMID: 24873788; PubMed Central PMCID: PMC4113396.

PURPOSE: This study aims to assess and compare the value of FDG PET with combined In-labeled leukocyte/Tc-sulfur colloid bone marrow (WBC/BM) imaging for

diagnosing infection in hip and knee prostheses.

**METHODS:** In this prospective study, patients with painful hip or knee arthroplasty, who were scheduled to undergo clinical and diagnostic evaluation for prosthesis revision, were included. They have been studied by using FDG PET and WBC/BM scan. This study was institutional review board approved and Health Insurance Portability and Accountability Act compliant. All patients provided written informed consent.

**RESULTS:** A total of 134 hip and 87 knee prostheses, suspected of being either infected or noninfectious loosening, were evaluated. All 221 prostheses underwent FDG PET, whereas both WBC/BM imaging and FDG PET were performed in 88 prostheses. The initial analysis of data from the WBC/BM images demonstrated somewhat suboptimal results compared with those of FDG PET scans on 88 patients. In addition, some patients were not willing to undergo both procedures and therefore participate in this study. Therefore, a decision was made to eliminate WBC/BM imaging from the procedures for the remainder of this research study. This decision was reached partly because of the significant radiation dose delivered from labeled WBC and safety issues related to preparing these labeled cells. Final diagnosis was based on microbiological examinations of the surgical specimens in 125 prostheses and joint aspirations combined with the clinical follow-up of 6 months or more in 86 prostheses. The sensitivity, specificity, positive predictive value, and negative predictive value of FDG PET in hip prostheses were 81.8%, 93.1%, 79.4%, and 94.0%, respectively, and in knee prostheses were 94.7%, 88.2%, 69.2%, and 98.4%, respectively. The sensitivity, specificity, positive predictive value, and negative predictive value of WBC/BM imaging in hip prostheses were 38.5%, 95.7%, 71.4%, and 84.6%, respectively, and in knee prostheses were 33.3%, 88.5%, 25.0%, and 92.0%, respectively. In those cases that underwent both FDG PET and WBC/BM imaging, there was a trend ( $P = 0.0625$ ) toward a higher sensitivity for FDG PET in hip prostheses, whereas other comparisons did not show any significant differences between the 2 imaging modalities.

**CONCLUSIONS:** Based on this study, the diagnostic performance of FDG PET scan in detecting infection in painful hip and knee prostheses is optimal for routine clinical application. Considering the complexity and costs of WBC/BM imaging and related safety issues associated with this preparation, FDG PET seems to be an appropriate alternative for assessing these patients.

PMCID: PMC4113396 [Available on 2015/7/1]

PMID: 24873788 [PubMed - in process]

101: Bhutta ZA, Das JK, Bahl R, Lawn JE, Salam RA, Paul VK, Sankar MJ, Blencowe H, Rizvi A, Chou VB, Walker N; Lancet Newborn Interventions Review Group; Lancet Every Newborn Study Group. Can available interventions end preventable deaths in mothers, newborn babies, and stillbirths, and at what cost? *Lancet*. 2014 Jul 26;384(9940):347-70. doi: 10.1016/S0140-6736(14)60792-3. Epub 2014 May 19. Review. Erratum in: *Lancet*. 2014 Jul 26;384(9940):308. Sankar, Jeeva M [corrected to Sankar, M Jeeva]. PubMed PMID: 24853604.

Progress in newborn survival has been slow, and even more so for reductions in stillbirths. To meet Every Newborn targets of ten or fewer neonatal deaths and ten or fewer stillbirths per 1000 births in every country by 2035 will necessitate accelerated scale-up of the most effective care targeting major causes of newborn deaths. We have systematically reviewed interventions across the continuum of care and various delivery platforms, and then modelled the effect and cost of scale-up in the 75 high-burden Countdown countries. Closure of the quality gap through the provision of effective care for all women and newborn

babies delivering in facilities could prevent an estimated 113,000 maternal deaths, 531,000 stillbirths, and 1.325 million neonatal deaths annually by 2020 at an estimated running cost of US\$4.5 billion per year (US\$0.9 per person). Increased coverage and quality of preconception, antenatal, intrapartum, and postnatal interventions by 2025 could avert 71% of neonatal deaths (1.9 million [range 1.6-2.1 million]), 33% of stillbirths (0.82 million [0.60-0.93 million]), and 54% of maternal deaths (0.16 million [0.14-0.17 million]) per year. These reductions can be achieved at an annual incremental running cost of US\$5.65 billion (US\$1.15 per person), which amounts to US\$1928 for each life saved, including stillbirths, neonatal, and maternal deaths. Most (82%) of this effect is attributable to facility-based care which, although more expensive than community-based strategies, improves the likelihood of survival. Most of the running costs are also for facility-based care (US\$3.66 billion or 64%), even without the cost of new hospitals and country-specific capital inputs being factored in. The maximum effect on neonatal deaths is through interventions delivered during labour and birth, including for obstetric complications (41%), followed by care of small and ill newborn babies (30%). To meet the unmet need for family planning with modern contraceptives would be synergistic, and would contribute to around a halving of births and therefore deaths. Our analysis also indicates that available interventions can reduce the three most common cause of neonatal mortality--preterm, intrapartum, and infection-related deaths--by 58%, 79%, and 84%, respectively.

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PMID: 24853604 [PubMed - indexed for MEDLINE]

102: Darmstadt GL, Kinney MV, Chopra M, Cousens S, Kak L, Paul VK, Martines J, Bhutta ZA, Lawn JE; Lancet Every Newborn Study Group. Who has been caring for the baby? *Lancet*. 2014 Jul 12;384(9938):174-88. doi: 10.1016/S0140-6736(14)60458-X. Epub 2014 May 19. Review. PubMed PMID: 24853603.

Nearly a decade ago, The Lancet published the Neonatal Survival Series, with an ambitious call for integration of newborn care across the continuum of reproductive, maternal, newborn, and child health and nutrition (RMNCH). In this first of five papers in the Every Newborn Series, we consider what has changed during this decade, assessing progress on the basis of a systematic policy heuristic including agenda-setting, policy formulation and adoption, leadership and partnership, implementation, and evaluation of effect. Substantial progress has been made in agenda setting and policy formulation for newborn health, as witnessed by the shift from maternal and child health to maternal, newborn, and child health as a standard. However, investment and large-scale implementation have been disappointingly small, especially in view of the size of the burden and potential for rapid change and synergies throughout the RMNCH continuum. Moreover, stillbirths remain invisible on the global health agenda. Hence that progress in improvement of newborn survival and reduction of stillbirths lags behind that of maternal mortality and deaths for children aged 1-59 months is not surprising. Faster progress is possible, but with several requirements: clear communication of the interventions with the greatest effect and how to overcome bottlenecks for scale-up; national leadership, and technical capacity to integrate and implement these interventions; global coordination of partners, especially within countries, in provision of technical assistance and increased funding; increased domestic investment in newborn health, and access to specific commodities and equipment where needed; better data to monitor progress, with local data used for programme improvement; and accountability for results at all levels, including demand from communities and mortality targets in the post-2015 framework. Who will step up during the next decade to ensure decision making in countries leads to implementation of stillbirth and newborn health interventions

within RMNCH programmes?

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PMID: 24853603 [PubMed - indexed for MEDLINE]

103: Jalan R, Yurdaydin C, Bajaj JS, Acharya SK, Arroyo V, Lin HC, Gines P, Kim WR, Kamath PS; World Gastroenterology Organization Working Party. Toward an improved definition of acute-on-chronic liver failure. *Gastroenterology*. 2014 Jul;147(1):4-10. doi: 10.1053/j.gastro.2014.05.005. Epub 2014 May 20. PubMed PMID: 24853409.

PMID: 24853409 [PubMed - in process]

104: Kakkar AK, Dahiya N. Bedaquiline for the treatment of resistant tuberculosis: promises and pitfalls. *Tuberculosis (Edinb)*. 2014 Jul;94(4):357-62. doi: 10.1016/j.tube.2014.04.001. Epub 2014 Apr 18. PubMed PMID: 24841672.

Treatment of multidrug-resistant tuberculosis (MDR-TB) is hindered by limited efficacy and significant toxicity of second-line drugs. The need for new therapeutic options is critical to combat the global MDR-TB epidemic. Bedaquiline is a novel oral diarylquinoline approved by Food and Drug administration (FDA) for the treatment of adults with pulmonary MDR-TB on the basis of Phase IIb trial data under the provisions of the accelerated approval regulations for serious or life-threatening conditions. The FDA advisory committee members voted unanimously on efficacy data based on surrogate measures, however they were split on the issues of safety of bedaquiline. Main safety concerns include QT interval prolongation, hepatic related adverse events, and excess mortality in bedaquiline treated patients. While bedaquiline approval is a story of many firsts and certainly a welcome addition to the existing arsenal of anti-TB agents, a cautiously optimistic approach is required to assess the risk benefit profile of the drug. Acceleration of further Phase III trials and clinical studies is imperative, as is timely analysis of emerging data on the real world use of the drug. This mini review outlines the clinical pharmacology of bedaquiline highlighting the potential promises and challenges that implicate the risk benefit profile of drug.

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PMID: 24841672 [PubMed - in process]

105: Anand A, Srivastava N, Barwad P, Ramakrishnan S, Roy A, Bhargava B. Dyspnea in Eisenmenger syndrome and its amelioration by sildenafil: role of J receptors. *Int J Cardiol*. 2014 Jul 1;174(3):574-8. doi: 10.1016/j.ijcard.2014.04.131. Epub 2014 Apr 21. PubMed PMID: 24820738.

**BACKGROUND:** In Eisenmenger syndrome (ES), oral phosphodiesterase type-5 inhibitors, which are preferential pulmonary vasodilators, reduce the elevated pulmonary artery pressure and pulmonary vascular resistance index by increasing cyclic guanosine monophosphate (cGMP). However, no information is available as to how pulmonary vasodilatation alleviates the accompanying dyspnoea and improves patient's exercising ability.

**OBJECTIVES:** As the natural stimulus of juxtapulmonary capillary (J) receptors is an increase in interstitial pressure, the aim was to estimate their threshold level stimulation chemically by intravenous lobeline, before and after 6 weeks of

sildenafil therapy in treatment-naive ES patients.

**METHODS:** Nine Eisenmenger syndrome patients [mean age=26 (SD=1.6) years] underwent 6MWT and an exercise test before and 6 weeks after oral sildenafil (20mg 3× D). Their respiratory responses to threshold doses of intravenous lobeline were determined at both these stages.

**RESULTS:** After 6 weeks of sildenafil therapy, the 6MWD [from 453.3 (SD=50.9) m to 516.6 (SD=48.9) m; P=0.001] and the duration of exercise with the modified Bruce protocol from 7 min 53 s (SD=0.04) to 10 min 44 s (SD=0.88) (P=0.001) improved significantly. However, the improvement in oxygen saturation was not noteworthy. The lobeline dose required to produce threshold level of respiratory effects was higher in ES patients [37.5 (SD=3.4) µg/kg] and with sildenafil therapy it fell significantly [20.6 (SD=1.8) µg/kg; P=0.001].

**CONCLUSIONS:** J receptor threshold doses were elevated in ES patients and fell significantly with sildenafil therapy that was associated with improved exercise tolerance, implying thereby a role of J receptors in producing dyspnea in ES patients.

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PMID: 24820738 [PubMed - in process]

106: Kaushik JS, Chakrabarty B, Gulati S, Patel H, Lodha R, Pai G, Kumar A. Unusual late neurological complication in a child after an Indian krait bite. *Pediatr Neurol.* 2014 Jul;51(1):130-2. doi: 10.1016/j.pediatrneurol.2014.02.014. Epub 2014 Feb 28. PubMed PMID: 24814058.

**BACKGROUND:** Neurological manifestations of elapid snakebites include neuromuscular paralysis and cerebrovascular complications. Autonomic manifestations are observed in almost two third of patients following moderate to severe envenomation.

**PATIENT SUMMARY:** A 10-year-old boy presented with acute onset flaccid quadriparesis with encephalopathy, cranial neuropathy, and respiratory failure after bite of a common Indian krait. He also had features of autonomic instability in the form of hypertension and variable heart rate. Within 10 days, he was weaned from the ventilator and discharged on multiple oral antihypertensives. Within a week, he returned with focal status epilepticus. MRI of the brain suggested posterior reversible leukoencephalopathy. He recovered completely within 2 days with visual impairments while recovering. Within next 1 month, his antihypertensives were tapered completely. MRI of the brain, repeated after 3 months, confirmed complete resolution.

**CONCLUSIONS:** This patient highlights the fact that posterior reversible leukoencephalopathy can be a late complication of Indian krait bite secondary to autonomic instability with systemic hypertension.

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PMID: 24814058 [PubMed - in process]

107: Kapil U, Kabra M, Sareen N, Khenduja P, Pande S. Iodine nutrition status amongst neonates in Kangra district, Himachal Pradesh. *J Trace Elem Med Biol.* 2014 Jul;28(3):351-3. doi: 10.1016/j.jtemb.2014.03.009. Epub 2014 Apr 5. PubMed PMID: 24797042.

Iodine deficiency (ID) is an endemic health problem in Kangra district, Himachal

Pradesh (HP) state. ID leads to mental retardation, deaf mutism, squint, dwarfism, spastic diplegia, neurological defects and congenital anomalies. Iodine nutrition status amongst neonates can be assessed by estimating thyroid stimulating hormone (TSH). The present study was conducted with an objective to assess the iodine nutrition status amongst Neonates in Kangra district, HP. All of the hospitals in the district which provide obstetric services were enlisted, of which three were selected for this survey. A total of 613 umbilical cord blood samples of neonates were collected on filter paper and analyzed for TSH. WHO (2007) reported that a <3% frequency of TSH concentrations above 5 mIU/L in samples collected 3-4 days after birth indicates iodine sufficiency in a population. In our study we found that 73.4% of the neonates had TSH levels of more than 5 mlU/l, thus indicating ID in the population studied. Iodine deficiency continues to be a public health problem in Kangra district, Himachal Pradesh.

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PMID: 24797042 [PubMed - in process]

108: Sharma S, Kaushik S, Sinha M, Kushwaha GS, Singh A, Sikarwar J, Chaudhary A, Gupta A, Kaur P, Singh TP. Structural and functional insights into peptidyl-tRNA hydrolase. *Biochim Biophys Acta*. 2014 Jul;1844(7):1279-88. doi: 10.1016/j.bbapap.2014.04.012. Epub 2014 Apr 21. Review. PubMed PMID: 24768774.

Peptidyl-tRNA hydrolase is an essential enzyme which acts as one of the rescue factors of the stalled ribosomes. It is an esterase that hydrolyzes the ester bond in the peptidyl-tRNA molecules, which are products of ribosome stalling. This enzyme is required for rapid clearing of the peptidyl-tRNAs, the accumulation of which in the cell leads to cell death. Over the recent years, it has been heralded as an attractive drug target for antimicrobial therapeutics. Two distinct classes of peptidyl-tRNA hydrolase, Pth and Pth2, have been identified in nature. This review gives an overview of the structural and functional aspects of Pth, along with its sequence and structural comparison among various species of bacteria. While the mode of binding of the substrate to Pth and the mechanism of hydrolysis are still speculated upon, the structure-based drug design using this protein as the target is still largely unexplored. This review focuses on the structural features of Pth, giving a direction to structure-based drug design on this protein.

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PMID: 24768774 [PubMed - indexed for MEDLINE]

109: Ahmad F, Oyen F, Jan R, Budde U, Schneppenheim R, Saxena R. Germline de novo mutations and linkage markers vs. DNA sequencing for carrier detection in von Willebrand disease. *Haemophilia*. 2014 Jul;20(4):e311-7. doi: 10.1111/hae.12441. Epub 2014 Apr 8. PubMed PMID: 24712919.

Linkage analysis in autosomal inherited von Willebrand disease (VWD) is important to diagnose the carriers and reduce the burden of severe type VWD. The study was designed to identify the carriers and estimate the frequency of variable number of tandem repeats (VNTR) instability in VWD families. Carrier detection was performed in eight recessive type 3 VWD (VWD3) families using VNTRs VWF1 and VWF2, RsaI (789Thr/Ala) linkage markers, multimer analysis and DNA sequencing. Moreover, five dominant VWD families were studied through DNA sequencing and multimer analysis. Frequency of VWF VNTR instability was investigated in 20 VWD families. In VWD3 families, a total of 22 (81.5%) carriers were identified using

VWF1 and VWF2 markers. However, only 13(48.1%) carriers were identified through RsaI markers. Mutation screening revealed 22(81.5%) carriers in VWD3 and 4 (33.3%) carriers in VWD2 families. In comparison to DNA sequencing, the accuracy of VWF1 and VWF2 markers in VWD3 was 85.7% while RsaI could identify 68.2% carriers accurately. Mutations p.R1205H and p.C1272R were identified as de novo in families. Multimer analysis confirmed the identified carriers in VWD2 families. Three VWD families were found to be carrying VNTR instability for VWF1 and VWF2 locus. VNTRs could be an effective linkage markers for carrier detection in VWD3 families. However, in the event of germline de novo mutations and VNTR instability, it may confound risk of misdiagnosis of carriers. Multimer analysis could be an alternative way of carrier detection in dominant type 2A and type 2B VWD families.

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PMID: 24712919 [PubMed - in process]

110: Perumal V. Reproductive risk factors assessment for anaemia among pregnant women in India using a multinomial logistic regression model. *Trop Med Int Health*. 2014 Jul;19(7):841-51. doi: 10.1111/tmi.12312. Epub 2014 Apr 7. PubMed PMID: 24708308.

**OBJECTIVE:** To assess reproductive risk factors for anaemia among pregnant women in urban and rural areas of India.

**METHOD:** The International Institute of Population Sciences, India, carried out third National Family Health Survey in 2005-2006 to estimate a key indicator from a sample of ever-married women in the reproductive age group 15-49 years. Data on various dimensions were collected using a structured questionnaire, and anaemia was measured using a portable HemoCue instrument. Anaemia prevalence among pregnant women was compared between rural and urban areas using chi-square test and odds ratio. Multinomial logistic regression analysis was used to determine risk factors.

**RESULTS:** Anaemia prevalence was assessed among 3355 pregnant women from rural areas and 1962 pregnant women from urban areas. Moderate-to-severe anaemia in rural areas (32.4%) is significantly more common than in urban areas (27.3%) with an excess risk of 30%. Gestational age specific prevalence of anaemia significantly increases in rural areas after 6 months. Pregnancy duration is a significant risk factor in both urban and rural areas. In rural areas, increasing age at marriage and mass media exposure are significant protective factors of anaemia. However, more births in the last five years, alcohol consumption and smoking habits are significant risk factors.

**CONCLUSION:** In rural areas, various reproductive factors and lifestyle characteristics constitute significant risk factors for moderate-to-severe anaemia. Therefore, intensive health education on reproductive practices and the impact of lifestyle characteristics are warranted to reduce anaemia prevalence.

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PMID: 24708308 [PubMed - indexed for MEDLINE]

111: Layek A, Maitra S, Pal S, Bhattacharjee S, Baidya DK. Efficacy of vasopressin during cardio-pulmonary resuscitation in adult patients: a meta-analysis. *Resuscitation*. 2014 Jul;85(7):855-63. doi: 10.1016/j.resuscitation.2014.03.303. Epub 2014 Apr 2. PubMed PMID: 24704138.

**BACKGROUND:** Experimental and animal studies suggested that vasopressin may have a favorable survival profile during CPR. This meta-analysis aimed to determine the efficacy of vasopressin in adult cardiac patients.

**METHODOLOGY:** Meta-analysis of randomized control trials (RCTs) comparing the efficacy of vasopressin containing regimen during CPR in adult cardiac arrest population with an epinephrine only regimen.

**RESULTS:** A total of 6120 patients from 10 RCTs were included in this meta-analysis. Vasopressin use during CPR has no beneficial impact in an unselected population in ROSC [OR 1.19, 95% CI 0.93, 1.52], survival to hospital discharge [OR 1.13, 95% CI 0.89, 1.43], survival to hospital admission [OR 1.12, 95% CI 0.99, 1.27] and favorable neurological outcome [OR 1.02, 95% CI 0.75, 1.38]. ROSC in "in-hospital" cardiac arrest setting [OR 2.20, 95% CI 1.08, 4.47] is higher patients receiving vasopressin. Subgroup analyses revealed equal or higher chance of ROSC [OR 2.15, 95% CI 1.00, 4.61], higher possibility of survival to hospital discharge [OR 2.39, 95% CI 1.34, 4.27] and favorable neurological outcome [OR 2.58, 95% CI 1.39, 4.79] when vasopressin was used as repeated boluses of 4-5 times titrating desired effects during CPR.

**CONCLUSION:** ROSC in "in-hospital" cardiac arrest patients is significantly better when vasopressin was used. A subgroup analysis of this meta-analysis found that ROSC, survival to hospital admission and discharge and favorable neurological outcome may be better when vasopressin was used as repeated boluses of 4-5 times titrated to desired effects; however, overall no beneficial effect was noted in unselected cardiac arrest population.

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PMID: 24704138 [PubMed - in process]

112: Jose A, Nagori SA, Bhutia O, Roychoudhury A. Odontogenic infection and pachymeningitis of the cavernous sinus. Br J Oral Maxillofac Surg. 2014 Jul;52(6):e27-9. doi: 10.1016/j.bjoms.2014.03.005. Epub 2014 Apr 2. PubMed PMID: 24703382.

Hypertrophic pachymeningitis is a rare inflammatory process that causes thickening of the dura mater. Most cases are idiopathic, but it can result from many inflammatory and infective conditions. We present a case of pachymeningitis of the cavernous sinus, the aetiology of which may have been dental.

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PMID: 24703382 [PubMed - in process]

113: Talwar S, Jaiswal LS, Choudhary SK, Saxena A, Juneja R, Kothari SS, Airan B. Retrospective study of results of Kawashima procedure. Heart Lung Circ. 2014 Jul;23(7):674-9. doi: 10.1016/j.hlc.2014.01.016. Epub 2014 Feb 14. PubMed PMID: 24702981.

**BACKGROUND:** Patients with single ventricle physiology and an interrupted inferior caval vein undergo the Kawashima procedure. With increasing follow-up, pulmonary arteriovenous malformations may develop requiring hepatocardiac venous redirection.

**METHODS:** Between January 2005 and December 2012, 15 patients underwent the Kawashima procedure. Preoperative and postoperative characteristics along with



functional class, intra-operative details, post-operative course, saturations and haematocrit were recorded.

**RESULTS:** Median age at operation was five years (range 1- 20 years). Five patients had antegrade pulmonary blood flow interrupted and 10 patients had open antegrade flow. There were no deaths. Mean saturation in postoperative period was 90.8  $\pm$ 1.36%. Median duration of mechanical ventilation and inotropic support was six and 16 hours respectively. Median duration of pleural drainage was six days. Median duration of pleural drainage in antegrade flow open and interrupted group was six days and four days respectively. The mean hospital stay was 10.5 days  $\pm$ 7.1 days. Mean follow up was 40.2  $\pm$ 31 months (median-30 months). Nine patients (60%) were in New York Heart Association (NYHA) functional class 1 and five patients (33.3%) were in NYHA functional class 2 at last follow-up. Only one patient was in class 3 and needs completion Fontan.

**CONCLUSIONS:** The Kawashima procedure can be safely performed with acceptable early results. Although studies have shown the risk of pulmonary arteriovenous malformations after Kawashima procedure in the mid and long-term, our findings do not support this. Kawashima procedure with open antegrade pulmonary blood flow as a definite intervention in such patients is debatable.

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PMID: 24702981 [PubMed - in process]

114: Passah A, Tripathi M, Kumar R, Das CJ, Goyal A, Bal CS. Brain metastasis in carcinoma breast demonstrated on (68)Ga NOTA-bisphosphonate PET/CT. Clin Nucl Med. 2014 Jul;39(7):653-4. doi: 10.1097/RLU.0000000000000436. PubMed PMID: 24686213.

Ga NOTA-bisphosphonate is a new bone-seeking PET radiotracer undergoing clinical evaluation. We report a case of a carcinoma breast who underwent Ga NOTA-bisphosphonate PET/CT for detection of skeletal metastasis. In addition to skeletal metastasis, a focal area of abnormal radiotracer uptake was noted in the brain, which was confirmed as brain metastasis on MRI.

PMID: 24686213 [PubMed - in process]

115: Lamy A, Tong W, Jung H, Gafni A, Singh K, Tyrwhitt J, Yusuf S, Gerstein HC; ORIGIN Investigators. Cost implications of the use of basal insulin glargine in people with early dysglycemia: the ORIGIN trial. J Diabetes Complications. 2014 Jul-Aug;28(4):553-8. doi: 10.1016/j.jdiacom.2014.02.012. Epub 2014 Mar 2. PubMed PMID: 24684774.

**AIMS:** The cost implications of the Outcome Reduction with an Initial Glargine Intervention (ORIGIN) trial were evaluated using a prespecified analysis plan.

**METHODS:** Purchasing power parity-adjusted country-specific costs were applied to consumed healthcare resources by participants from each country. Subgroup analyses were conducted on subgroups based on baseline metabolic status and diabetes duration.

**RESULTS:** The total undiscounted cost per participant in the insulin glargine arm was \$13,491 (\$13,080 to \$14,254) versus \$11,189 (\$10,568 to \$12,147) for standard care, an increase of \$2303 (\$1370 to \$3235;  $p < 0.0001$ ); the discounted increase

was \$2099 (\$1276 to \$2923;  $P < 0.0001$ ). The greater number of mainly generic oral anti-diabetic agents in the standard group partially offset the higher cost of basal insulin glargine. As the trial progressed and the standard group required more anti-diabetic medications, the annual cost difference decreased, reaching \$68 (-\$160 to \$295) in the last year. The subgroup whose baseline diabetes duration was  $\geq 6$  years achieved cost-savings during the trial.

**CONCLUSIONS:** From a global perspective basal insulin glargine use in ORIGIN incurred greater costs than standard care using older generic drugs. Nevertheless, the cost difference fell with time such that the intervention was cost-neutral by the last year.

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PMID: 24684774 [PubMed - in process]

116: Sarangi SC, Tripathi M, Kakkar AK, Gupta YK. Effect of antiepileptic therapy on trace elements status in Indian population in a tertiary care hospital from northern India: a cross sectional study. *Epilepsy Res.* 2014 Jul;108(5):917-27. doi: 10.1016/j.eplespsyres.2014.01.014. Epub 2014 Jan 30. PubMed PMID: 24679946.

**AIM:** Conventional antiepileptics (AEDs) have been shown to alter the homeostasis of copper, zinc, and selenium in persons with epilepsy (PWE). The effects of newer AEDs on trace elements have not been addressed yet. This cross-sectional study evaluated trace elements and electrolytes status in PWE on conventional and newer AEDs treatment.

**METHODS:** A total of 307 adult persons with epilepsy and 42 healthy controls were recruited. Panels of ten trace elements estimated by inductively coupled plasma-atomic emission spectrometry, electrolytes, liver and renal function status were compared among subjects grouped according to the monotherapy of AEDs and type of conventional and newer AEDs.

**RESULTS:** Out of the total 307 PWE, 171 were on monotherapy [valproic acid (VPA) (n=50), carbamazepine (n=47), phenytoin (n=49), levetiracetam (n=21), lamotrigine (n=4)]. AEDs monotherapy groups had no significant difference in the trace element levels, except higher nickel level in levetiracetam group and low iron level in lamotrigine group compared to VPA group. Compared to control [zinc level 698.0 (367.8-3084.4)ng/ml], levetiracetam group had higher zinc [1293.1 (997.7-2419.7)ng/ml,  $p < 0.0001$ ], selenium, copper, iron, aluminium, cadmium, cobalt, and nickel levels; similar manganese and lead levels. Other monotherapy groups were having similar metal levels as that of levetiracetam group except nickel, iron, lead, and selenium levels.

**CONCLUSION:** Trace element status was significantly altered with both conventional and newer antiepileptic drugs as compared to control; however, there was not much difference in between conventional and new drug treated groups. Prospective studies will address its impact on treatment response and adverse effect profile. CTRI REGISTRATION NUMBER: REF/2013/03/004819.

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PMID: 24679946 [PubMed - in process]

117: Kokkayil P, Kurapati S, Negi N, Vajpayee M. Comparative evaluation of a reverse transcriptase based assay for HIV-1 viral load quantitation in resource limited settings. *J Virol Methods.* 2014 Jul;203:1-4. doi:

10.1016/j.jviromet.2014.02.021. Epub 2014 Mar 23. PubMed PMID: 24671025.

Molecular viral load assays are routinely used in high income countries for monitoring the copy number of human immunodeficiency virus (HIV) RNA. However, they require sophisticated facilities and expensive reagents and instruments. Hence, their routine use for patients belonging to resource limited settings is difficult and a low cost alternative is the need of the hour. This was a cross sectional study that analyzed and compared a reverse transcriptase enzyme based assay (Cavidi ExaVir Load version 3) with a real time polymerase chain reaction (PCR) assay (Roche COBAS TaqMan) in resource limited settings with subtype C predominance. The study included 75 HIV-1 positive treatment naïve patients whose CD4+ T lymphocytes count was estimated using BD FACS system and viral loads were quantified using both Cavidi ExaVir Load assay version 3 and Roche COBAS TaqMan Real Time PCR assay. The statistical analysis was performed using the Graph Pad Prism 5 software. The difference in the mean log<sub>10</sub> viral load values was found to be 0.2log<sub>10</sub>copies/ml. The Bland Altman plot showed a clustering of viral load values toward the lower copy range. 78% of the samples had an agreement of ≤0.5 log<sub>10</sub> copies/ml and 90.74% of the samples had an agreement of ≤1 log<sub>10</sub> copies/ml. Both the assays showed a trend of negative correlation with the CD4+ T cell counts. The study found that ExaVir Load assay can be used as an alternative to the existing molecular assays in resource limited settings for the purpose of routine viral load measurement and monitoring treatment response.

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PMID: 24671025 [PubMed - in process]

118: Singh S, Moksha L, Sharma N, Titiyal JS, Biswas NR, Velpandian T. Development and evaluation of animal models for sex steroid deficient dry eye. *J Pharmacol Toxicol Methods*. 2014 Jul-Aug;70(1):29-34. doi: 10.1016/j.vascn.2014.03.004. Epub 2014 Mar 13. PubMed PMID: 24632522.

**Purpose:** The present study was conducted to develop animal models to mimic postmenopausal/androgen deficiency dry eye and to evaluate the expression of sex steroid receptors (NR3A1, NR3A2 and NR3C4) in the ocular tissues of the developed models. **Methods:** The study was conducted in healthy Wistar rats of either sex weighing 180-250g. Bilateral ovariectomy was performed in female rats and oral finasteride (dose of 1.16mg/kg/day) challenge was given to both male and female rats. Along with time tear film stability was assessed by using cotton thread method and tear breakup time (TBUT). Dew point calculation was done using August-Roche-Magnus approximation during the tear assessments to correlate environmental factors affecting the tear function tests. At the end, animals were sacrificed and ocular tissues (lacrimal gland and cornea) were subjected for the quantification of the expression of NR3A1 (ER- $\alpha$ ), NR3A2 (ER- $\beta$ ) and androgen (NR3C4) receptors. **Results:** The impact of ovariectomy caused a significant tear film deficiency from the 20th day onwards in all female rats. The ten day finasteride administration also showed a significant tear film deficiency in both male and female rats. However, subjecting 60days post ovariectomy rats to finasteride challenge did not show any further decrease in tear flow. Gene expression analysis also revealed a significant downregulation of sex steroid receptors in ocular tissues after ovariectomy and finasteride challenge. **Discussion and conclusion:** From this study, it has been concluded that ovariectomized and finasteride treated antiandrogenic models produced a significant tear deficiency in the rats which can be explored for pharmacological screening of topical agents and understanding the disease process in postmenopausal and androgen deficiency dry eye disorders.

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PMID: 24632522 [PubMed - in process]

119: Ramachandran R, Rewari V, Chandralekha C, Sinha R, Trikha A, Sharma P. Sub-Tenon block does not provide superior postoperative analgesia vs intravenous fentanyl in pediatric squint surgery. *Eur J Ophthalmol*. 2014 Jul 24;24(5):643-9. doi: 10.5301/ejo.5000438. Epub 2014 Feb 13. PubMed PMID: 24619855.

**PURPOSE:** We evaluated the efficacy of sub-Tenon block in decreasing perioperative pain, incidence of intraoperative oculocardiac reflex (OCR), and postoperative nausea and vomiting (PONV) in pediatric squint surgery.

**METHODS:** A total of 67 children age 2-12 years, American Society of Anesthesiologists Physical Status 1 and 2, were randomized to receive either sub-Tenon block (ST) in the operative eye or 2 mcg/kg of intravenous fentanyl (F) for squint surgery after induction of general anesthesia in this double-blind study. Postoperative pain was measured by either modified Children's Hospital of Eastern Ontario Pain Scale (CHEOPS) or Visual Analogue Scale (VAS). Pain in the postoperative period (up to 2 hours) was measured as the primary endpoint. Other parameters measured in the groups were intraoperative hemodynamics, postoperative modified CHEOPS or VAS at shifting, 1, 2, 6, 12, and 24 hours after surgery, incidence of intraoperative OCR, and PONV at shifting, 30 minutes, 1, 2, 6, 12, and 24 hours after surgery.

**RESULTS:** There was no statistical difference in the postoperative pain scores in the recovery room up to 2 hours after surgery. The VAS and CHEOPS scores were not different in the groups up to 24 hours after surgery. The incidence of OCR was significantly higher in group F than group ST. The incidence of PONV was significantly higher in group F than group ST at 30 minutes and 1 hour after the surgery (41%, 47% vs 19%, 9%, respectively,  $p < 0.05$ ). However, there was no statistically significant difference in intraoperative hemodynamics and PONV scores after 2 hours in the postanesthesia care unit.

**CONCLUSIONS:** Use of sub-Tenon block does not decrease the incidence of postoperative pain significantly in children undergoing squint surgery. However, it leads to a statistically significant decrease in the incidence of intraoperative OCR and PONV in the early recovery period in these patients.

PMID: 24619855 [PubMed - in process]

120: Vanathi M, Kashyap S, Khan R, Seth T, Mishra P, Mahapatra M, Tandon R. Ocular surface evaluation in allogeneic hematopoietic stem cell transplantation patients. *Eur J Ophthalmol*. 2014 Jul 24;24(5):655-66. doi: 10.5301/ejo.5000451. Epub 2014 Mar 7. PubMed PMID: 24604604.

**PURPOSE:** To evaluate ocular surface of chronic graft versus host disease (GVHD) patients in allogeneic hematopoietic stem cell transplantation (allo-HSCT).

**METHODS:** Cross-sectional study of allo-HSCT patients. Data recorded included Ocular Surface Disease Index (OSDI) score, fluorescein tear break-up time (FTBUT), Schirmer I test, ocular surface staining, dry eye severity, and conjunctival impression cytology (CIC).

**RESULTS:** Of 40 allo-HSCT patients (mean age  $25.7 \pm 11.03$  years) studied, dry eye disease was noted in 30%. The OSDI was mild in 16.67%, moderate in 45.83%, and severe in 20.83% ocular GVHD (oGVHD) eyes; mild in 94.64%, moderate in 5.36% non-oGVHD eyes ( $p < 0.001$ ). The FTBUT was  $\leq 5$  seconds in 45.83%,  $> 5$  seconds in 54.17% of eyes with chronic oGVHD. Schirmer I test score was  $\leq 5$  mm in 58.33% of

eyes with oGVHD. Conjunctival staining score was <3 in 25%, ≥3 in 75% of oGVHD eyes. Corneal staining score of <3 in 79.17%, ≥3 in 20.83% was seen in oGVHD eyes. Chronic oGVHD was seen in 24 eyes, with dry eye severity of level 3 in 17.5%, level 2 in 2.5%, level 1 in 10%. The CIC was abnormal in 75% with altered morphology seen in 22 eyes with oGVHD (91.7%) and 38 eyes without oGVHD (67.9%) (p = 0.024).

**CONCLUSIONS:** Significant ocular surface changes occur due to chronic oGVHD in allo-HSCT patients. The OSDI score, corneal involvement, and Schirmer I test are indicative of ocular morbidity in post allo-HSCT eyes. Conjunctival impression cytology abnormality is also seen in eyes without oGVHD.

PMID: 24604604 [PubMed - in process]

121: Panda SS, Agarwala S, Kabra SK, Bhatnagar V. A survey of pulmonary function abnormalities following thoracotomy. *Indian J Pediatr.* 2014 Jul;81(7):660-4. doi: 10.1007/s12098-014-1342-6. Epub 2014 Mar 6. PubMed PMID: 24596059.

**OBJECTIVE:** To study the incidence and type of pulmonary function abnormalities after thoracotomy in children.

**METHODS:** Children below 12 y of age who had undergone thoracotomy for any condition and have at least 2 y follow up were included in the study. Detailed assessment of the patients included history and general examination, clinical assessment of pulmonary function, bedside tests to assess pulmonary function and laboratory pulmonary function test using portable spirometer.

**RESULTS:** Fifty two patients were included in the study. Twenty-seven were cases of esophageal atresia with trachea-esophageal fistula (EATEF), nine pulmonary metastasis from abdominal solid tumors, six mediastinal masses, three hydatid cyst, three eventration of diaphragm, two bronchiectasis, and one each of H-type TEF and congenital esophageal stenosis. The mean age at the time of evaluation was 6.3 y (range 2-18 y). While all the patients were clinically assessed, only 25 (48 %) were eligible for bedside tests and 23 (44 %) for spirometry. The incidences of abnormalities picked were: dyspnea during exercise 8/52 (15.4 %), dyspnea on exercise and on climbing stairs 1/52 (2 %), decreased breath holding time 2/25 (8 %), abnormal incentive spirometry 1/25 (4 %), mild restrictive pattern on pulmonary function test (PFT) 11/23 (47.8 %), moderate restrictive pattern on PFT 2/23 (8.7 %). None had an obstructive pattern on PFT.

**CONCLUSIONS:** Though the incidences of pulmonary function abnormalities were high, these were of mild grade. Close follow up of patients after thoracotomy would be needed for early pick up and appropriate management of these abnormalities to prevent long-term consequences.

PMID: 24596059 [PubMed - in process]

122: Kundu P, Lata S, Sharma P, Singh H, Malhotra A, Bal C. Prospective evaluation of (68)Ga-DOTANOC PET-CT in differentiated thyroid cancer patients with raised thyroglobulin and negative (131)I-whole body scan: comparison with (18)F-FDG PET-CT. *Eur J Nucl Med Mol Imaging.* 2014 Jul;41(7):1354-62. doi: 10.1007/s00259-014-2723-9. Epub 2014 Feb 22. PubMed PMID: 24562651.

**PURPOSE:** The purpose of the study was to evaluate the role of (68)Ga-DOTANOC PET-CT in differentiated thyroid cancer (DTC) patients with negative (131)I-whole body scan (WBS) along with serially increasing serum thyroglobulin (Tg), and compare the same with (18)F-FDG PET-CT.

**METHODS:** Sixty two DTC patients with serially rising Tg levels and negative (131)I-WBS were prospectively enrolled. All patients underwent (68)Ga-DOTANOC PET-CT and (18)F-FDG PET-CT within an interval of two weeks. PET-CT analysis was done on a per-patient basis, location wise and lesion wise. All PET-CT lesions were divided into four categories-local, nodal, pulmonary and skeletal. Histopathology and/or serial serum Tg level, clinical and imaging follow up (minimum-1 year) were used as a reference standard.

**RESULTS:** Ga-DOTANOC PET-CT demonstrated disease in 40/62 (65 %) patients and (18)F-FDG PET-CT in 45/62 (72 %) patients, with no significant difference on McNemar analysis ( $p=0.226$ ). Per-patient sensitivity and specificity of (68)Ga-DOTANOC PET-CT was 78.4 %, 100 %, and for (18)F-FDG PET-CT was 86.3 %, 90.9 %, respectively. Out of 186 lesions detected by both PET-CTs, 121/186 (65 %) lesions were seen on (68)Ga-DOTANOC PET-CT and 168/186 (90.3 %) lesions on (18)F-FDG PET-CT ( $p<0.0001$ ). There were 103/186 (55 %) lesions concordant on both. Excellent agreement was noted between (68)Ga-DOTANOC PET-CT and (18)F-FDG PET-CT for detection of local disease ( $\kappa=0.92$ ), while moderate agreement was noted for nodal and pulmonary disease ( $\kappa=0.67$ ). (68)Ga-DOTANOC PET-CT changed management in 21/62 (34 %) patients and (18)F-FDG PET-CT in 17/62 (27 %) patients.

**CONCLUSION:** Ga-DOTANOC PET-CT is inferior to (18)F-FDG PET-CT on lesion based but not on patient based analysis for detection of recurrent/residual disease in DTC patients with negative WBS scan and elevated serum Tg levels. It can also help in selection of potential candidates for peptide receptor radionuclide therapy.

PMID: 24562651 [PubMed - in process]

123: Yadav R, Bhutia O, Shukla G, Roychoudhury A. Distraction osteogenesis for management of obstructive sleep apnoea in temporomandibular joint ankylosis patients before the release of joint. *J Craniomaxillofac Surg*. 2014 Jul;42(5):588-94. doi: 10.1016/j.jcms.2013.07.031. Epub 2013 Aug 22. PubMed PMID: 24529347.

**AIM:** To evaluate the effects of distraction osteogenesis in management of obstructive sleep apnoea patients secondary to temporomandibular joints ankylosis.

**METHODS:** Fifteen patients were included in study. Preoperatively the patients were worked up for polysomnography and CT scans. Only those patients with Apnoea-hypopnoea index  $>15$  events/h denoting moderate to severe obstructive sleep apnoea were included in the study. Distraction osteogenesis was followed with 5 days latency period in adult patients and 0 days for children. Rate of distraction was 1 mm/day for adults and 2 mm/day for children till the mandibular incisors were in reverse overjet. After 3 months post distraction assessment was done using polysomnography and CT scan. TMJ ankylosis was released by doing gap arthroplasty after distraction osteogenesis.

**RESULTS:** Post distraction improvement was seen in clinical features of OSA like daytime sleepiness and snoring. Epworth sleepiness scale improved from a mean of 10.25 to 2.25. Polysomnographic analysis also showed improvement in all cases with apnoea-hypopnoea index from 57.03 to 6.67 per hour. Lowest oxygen saturation improved from 64.47% to 81.20% and average minimum oxygen saturation improved from 92.17% to 98.19%. Body mass index improved from a mean of 18.26 to 21.39 kg/m<sup>2</sup>.

**CONCLUSION:** Distraction osteogenesis is a stable and beneficial treatment option for temporomandibular joint ankylosis patients with obstructive sleep apnoea.

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PMID: 24529347 [PubMed - in process]

124: Jacob TG. Fast-track medical course and its implications. *Anat Sci Educ.* 2014 Jul-Aug;7(4):329. doi: 10.1002/ase.1433. Epub 2014 Jan 8. PubMed PMID: 24403208.

PMID: 24403208 [PubMed - in process]

125: Vajpayee RB, Maharana PK, Jain S, Sharma N, Jhanji V. Thin lenticule Descemet's stripping automated endothelial keratoplasty: single, slow pass technique. *Clin Experiment Ophthalmol.* 2014 Jul;42(5):411-6. doi: 10.1111/ceo.12271. Epub 2013 Dec 9. PubMed PMID: 24224697.

**BACKGROUND:** To evaluate the outcomes of single pass thin lenticule sutureless Descemet's stripping automated endothelial keratoplasty with donor lenticules prepared using a 400µm microkeratome head.

**DESIGN:** Interventional case series.

**PARTICIPANTS:** Cases with corneal endothelial dysfunction.

**METHODS:** Fifteen cases with corneal endothelial dysfunction (eight pseudophakic bullous keratopathy, three Fuchs' endothelial dystrophy, three congenital hereditary endothelial dystrophy and one failed graft) underwent thin lenticule Descemet's stripping automated endothelial keratoplasty at a tertiary care hospital. Donor lenticule was prepared with a single pass 400µm Carriazo Barraquer microkeratome (Moria, Antony, France) head. Sutureless Descemet's stripping automated endothelial keratoplasty was performed in all the cases through a 3.5mm corneoscleral tunnel using a Busin glide for graft insertion.  
**MAIN OUTCOME MEASURES:** Main parameters evaluated were postoperative donor lenticule thickness and best-corrected visual acuity.

**RESULTS:** Donor lenticules were harvested successfully for all 15 cases without any complications. At 6-months follow up, the mean logMAR best-corrected visual acuity improved from  $1.87 \pm 0.52$  to  $0.109 \pm 0.11$  ( $P < 0.0001$ ). The mean donor lenticule thickness was  $111 \pm 17.62 \mu\text{m}$  (range 70-134µm) at the last follow up. The mean endothelial cell loss was  $26.33 \pm 1.34\%$ .

**CONCLUSIONS AND RELEVANCE:** Thin donor lenticules for Descemet's stripping automated endothelial keratoplasty can be safely harvested using a single pass technique with 400µm microkeratome head and can be used for a successful Descemet's stripping automated endothelial keratoplasty surgery.

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PMID: 24224697 [PubMed - in process]

126: Khanna N, Chandramohan K, Khaitan BK, Singh MK. Post waxing folliculitis: a clinicopathological evaluation. *Int J Dermatol.* 2014 Jul;53(7):849-54. doi: 10.1111/ijd.12056. Epub 2013 Oct 18. PubMed PMID: 24134338.

**BACKGROUND:** Epilation by waxing is one of the common methods of removing unwanted body hair, and follicular papules following this cosmetic procedure are not uncommon. However, this not so uncommon problem has not been clinically and

histopathologically evaluated.

**OBJECTIVE:** To study the clinicopathological profile of folliculitis temporally developing after epilation by waxing.

**SUBJECTS AND METHODS:** Clinical and histopathological evaluation was done in 28 patients who developed follicular papules within a period of eight weeks following a history of epilation by waxing over the same area. The demographic profile and the method and frequency of waxing were noted. The symptoms associated with and the morphology and distribution of the follicular lesions were recorded. A punch biopsy was done from a representative follicular lesion to evaluate the pathological changes.

**RESULTS:** All the patients recruited were females (100%) with a mean age of 24.33 + 2.43 years. While all 28 patients had waxed their forearms, 25 had waxed their arms, 18 their legs, and 10 their thighs. The most common sites affected by folliculitis were arms (25; 100%) and forearms (15/28; 53.6%). Thighs, though least frequently waxed, were involved in seven (70%) subjects. Of these, seven (25%) women complained of itching. The lesions in all patients were erythematous to skin colored follicular papules, though two (7.1%) patients also had nodular lesions. A punch biopsy done showed features suggestive of pseudofolliculitis. A granulomatous reaction was seen in nine (32.1%) biopsies. A foreign body identified as a hair shaft was seen in seven (25%) biopsies and keratin in one biopsy.

**CONCLUSIONS:** Folliculitis following epilation by waxing is more frequent in proximal parts of the extremities than in distal parts, even though distal parts are more frequently waxed. In one-third of the cases, post-waxing folliculitis is due to foreign body reaction to hair shaft or keratin and resembles pseudofolliculitis. To know exact pathogenesis, additional biopsies with multiple step sections need to be taken to look for retained fragments of hair shaft and /or foreign body reaction.

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PMID: 24134338 [PubMed - in process]

127: Gupta SK, Saxena A, Juneja R, Gulati GS. Left main coronary atresia in a child with absent pulmonary valve syndrome: early entrapment of an innocent bystander. *Congenit Heart Dis*. 2014 Jul;9(4):E125-8. doi: 10.1111/chd.12100. Epub 2013 Jun 5. PubMed PMID: 23735185.

Atresia of the left main coronary artery is a rare anomaly that, if left untreated, has an unfavorable outcome. We hereby report left main coronary artery atresia in a child with tetralogy of Fallot with absent pulmonary valve and discuss the possible developmental basis of the association.

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