

*This section of the journal serves to highlight the works and researches done by local doctors or doctors either in Brunei Darussalam or in collaborations with other centres that have been published in regional or international journals. This also includes works published as part of collaboration with centres outside of Brunei Darussalam. These works include review articles, original articles and case reports published between 16<sup>th</sup> December 2011 to 14<sup>th</sup> April 2012. (Some publications have been published or indexed at a later date than publication).*

### **Incidental cardiac abnormalities on non-electrocardiogram-gated multi-detector computed tomography imaging of the thorax and abdomen.**

Lim KC, Chai F, Teo LS.

Singapore Med J. 2011 Dec;52(12):906-12; quiz 913.

Little attention is usually paid to the heart on non-electrocardiogram (ECG)-gated multi-detector computed tomography (MDCT) imaging of the thorax and abdomen. The current MDCT systems have fast scanning capabilities that render non-ECG-gated images with reduced cardiac motion artefacts due to greater temporal and spatial resolution. This has allowed for better evaluation of the cardiac structures. We present a pictorial review of incidental cardiac abnormalities found on MDCT imaging of the thorax and abdomen performed in our institution. We systematically describe abnormalities involving the pericardium, myocardium, cardiac valves, cardiac chambers, coronary artery and congenital heart disease. Some of these images have echocardiograph and magnetic resonance imaging correlation. The purpose of this pictorial essay is to draw attention to cardiac abnormalities found incidentally on non-ECG-gated MDCT imaging of the thorax and abdomen, which may or may not be related to the patient's symptoms.

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Article is available free from  
<http://http://smj.sma.org.sg/5212/5212pe1.pdf>

### **Public opinion on renal transplantation in Brunei Darussalam.**

Teo TT, Hossain MM, Zinna S, Liew YP, Tan J.  
Transplant Proc. 2011 Dec;43(10):3599-603.

Brunei Darussalam is a small Muslim country with a high prevalence and incidence of kidney disease. At present, there is no local transplant program for patients on the renal replacement therapy program. In order to assess feasibility of a local transplant program, we decided to conduct a survey to assess public opinion on renal transplantation. The majority of the 300 respondents (78.7%) were willing to donate their kidneys if needed. Even after learning of the small theoretical risks of kidney failure, 72.33% of all respondents were still willing to proceed with transplantation. Respondents who had relatives on dialysis and who had a higher education level were more willing to donate their kidneys. There was no significant difference between Muslims and non-Muslims. Most respondents (59.7%) preferred to have transplantation done locally. This study shows that most Bruneians are receptive of the idea of living related kidney donations, which augurs well for the sustainability of a new program. More work is needed to overcome other barriers like the availability of surgical expertise and facilities and cost-benefit considerations.

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### **Gastric hematoma complicating routine biopsies**

Chong VH, Jalihal A

Turk J Gastroenterol. 2011 Dec;22(6):650-1.

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### **A case of breakage of LMA Supreme on its first use**

Simon BP.

*Indian J Anaesth.* 2011; 55;635-6.

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### **Epidemiology of burns in a major referral hospital in Brunei Darussalam.**

Pande KC, Ishak HL

*Singapore Med J.* 2012 Feb;53(2):124-7.

**Introduction:** Burn injuries are a public health concern across the world, particularly in Southeast Asia, where epidemiological data is lacking. This retrospective study was conducted to assess the epidemiology of patients with burns treated at a major referral hospital in Brunei Darussalam, with particular reference to demographics and aetiology. **Methods:** All patients were referred to and treated at the Burns Unit, where data was recorded by the on-duty nurse on a pre-designed form at the first attendance. A total of 211 patients (111 male, 100 female), comprising 10 inpatients and 201 outpatients, were treated during the study period. **Results:** The average age of the patients was  $19.6 \pm 20.9$  (median 10, range < 1-90) years. 67 (32%) patients were under two years of age. Scalding due to hot liquids was the most common cause (78.2%), followed by flame and contact burns. The majority of burns were sustained indoors either at home or at work (87.2%). The total body surface area (TBSA%) for the whole sample was  $3.7\% \pm 7.9\%$  (median 2%; range 1%-90%). Patients with flame burns ( $n = 19$ ) were older and had larger TBSA% ( $p < 0.05$ ). Inpatients had significantly higher TBSA% compared to outpatients ( $28.2\% \pm 26\%$  versus  $2.5\% \pm 2.1\%$ ;  $p < 0.005$ ). **Conclusion:** Scald burns sustained indoors are the most common across all age groups. Although the TBSA is small, a large number of children are affected. There is a need for burns prevention education programme in Brunei Darussalam.

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### **Utility of the electronic information resource UpToDate for clinical decision-making at bedside rounds.**

Phua J, See KC, Khalizah HJ, Low SP, Lim TK.

*Singapore Med J.* 2012 Feb;53(2):116-20.

**Introduction:** Clinical questions often arise at daily hospital bedside rounds. Yet, little information exists on how the search for answers may be facilitated. The aim of this prospective study was, therefore, to evaluate the overall utility, including the feasibility and usefulness of incorporating searches of UpToDate, a popular online information resource, into rounds. **Methods:** Doctors searched UpToDate for any unresolved clinical questions during rounds for patients in general medicine and respiratory wards, and in the medical intensive care unit of a tertiary teaching hospital. The nature of the questions and the results of the searches were recorded. Searches were deemed feasible if they were completed during the rounds and useful if they provided a satisfactory answer. **Results:** A total of 157 UpToDate searches were performed during the study period. Questions were raised by all ranks of clinicians from junior doctors to consultants. The searches were feasible and performed immediately during rounds 44% of the time. Each search took a median of three minutes (first quartile: two minutes, third quartile: five minutes). UpToDate provided a useful and satisfactory answer 75% of the time, a partial answer 17% of the time and no answer 9% of the time. It led to a change in investigations, diagnosis or management 37% of the time, confirmed what was originally known or planned 38% of the time and had no effect 25% of the time. **Conclusion:** Incorporating UpToDate searches into daily bedside rounds was feasible and useful in clinical decision-making.

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### **An international view of surgically assisted conception and surrogacy tourism.**

Ahmad N.

*Med Leg J.* 2011;79(Pt 4):135-45

Modern medicine, specifically assisted reproductive technology (ART), has overtaken the law in many jurisdictions around the world. New technologies and practices open a Pandora's Box of ethical, religious, social and legal questions, and may present

a variety of significant legal problems to the courts and legislators. Surrogate motherhood and pregnancy through ART have both attracted controversy. Some groups condemn ART and want it banned while its supporters acknowledge there is a need for legislative guidelines and regulations. A proposed statute, the Assisted Reproductive Technique Services Act, aimed at regulating reproductive technologies, including surrogacy arrangements, will be introduced in the Malaysian parliament, probably in 2012, and the Assisted Reproductive Technology (Regulation) Bill 2010 is already before the Indian parliament. This paper will discuss several of the potential socio-legal issues surrounding ART in the light of the complex situation, with a comparative analysis of the Malaysian, USA, UK and Indian positions.

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### **Terminal galactosylation of glycoconjugates in Plasmodium falciparum asexual blood stages and Trypanosoma brucei bloodstream trypomastigotes.**

Ramasamy R, Field MC.  
Exp Parasitol. 2012 Mar 3

There is definitive biochemical evidence for the presence of terminal  $\alpha$ -galactosyl residues ( $\alpha$ -gal) in the N-linked oligosaccharides and glycosphatidylinositol anchors (GPI anchors) of the variant surface glycoprotein of *Trypanosoma brucei* bloodstream trypomastigotes. Indirect evidence also exists for  $\alpha$ -gal in *Plasmodium falciparum* asexual blood stage glycoproteins and glycolipids. The occurrence of  $\alpha$ -gal in glycoproteins and glycolipids of *T. brucei* bloodstream trypomastigotes and *P. falciparum* late asexual blood stages was investigated by the binding of  $\alpha$ -gal-specific Bandeirea simplicifolia B4 lectin 1 (BSB4), incorporation of [ $^3$ H] galactose from UDP-[ $^3$ H]galactose into glycoproteins and glycolipids in microsomes in vitro, and bioinformatic searches for galactosyl-transferase coding sequences. The findings confirm the presence of  $\alpha$ -gal in a spectrum of *T. brucei* bloodstream trypomastigote glycoproteins and glycolipids and indicate its relative absence from *P. falciparum* asexual blood stage glycoconjugates.

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### **Low bone mineral density in Indian patients with fragility fractures.**

Pande KC, Pande S, Babhulkar S.  
Climacteric. 2012 Apr;15(2):163-6.

**Objective** Low bone mineral density (BMD) is a major risk factor for fragility fractures in osteoporosis. In recent studies, its use with clinical risk factors has been shown to enhance prediction of fragility fractures. The present study was done to assess BMD in Indian patients with fragility fractures using digital X-ray radiogrammetry (DXR-BMD). **Methods** A total of 228 patients (64 male and 164 female) admitted to an Orthopedic Hospital for management of fragility fracture were recruited. For each patient, DXR-BMD was obtained from an anteroposterior radiograph of the non-dominant hand. **Results** The number of subjects with hip fracture was 104 (40 male, 64 female). Vertebral fractures were seen in 67 patients (11 male, 56 female) and distal radial fracture in 57 patients (13 male, 44 female). The DXR-BMD ( $g/cm^2$ ) was significantly lower in subjects with any fragility fracture (0.51 vs. 0.58 in men and 0.41 vs. 0.54 in women). When compared to the age-matched normative reference data by decade, all subjects with fragility fracture had significantly lower DXR-BMD except male subjects in the age decade of 40-49 years. **Conclusion** This study confirms lower DXR-BMD in Indian subjects with fragility fractures. This may have a potential role in fracture prediction when used with clinical risk factors in the Indian population.

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### **A CT-based classification of prior ACL femoral tunnel location for planning revision ACL surgery.**

Magnussen RA, Debieux P, Benjamin B, Lustig S, Demey G, Servien E, Neyret P.  
Knee Surg Sports Traumatol Arthrosc. 2011 Dec 8. [Epub ahead of print]

**PURPOSE:** The purposes of this study are to describe an ACL femoral tunnel classification system for use in planning revision ACL reconstruction based on 3-D computed tomography (CT) reconstructions and to evaluate its inter- and intra-rater reliability.

**METHODS:** A femoral tunnel classification system was developed based on the location of the femoral tunnel relative to the lateral intercondylar ridge. The femoral tunnel was classified as Type I if it was located entirely below and posterior to the ridge as

viewed from distally, Type II if it was slightly malpositioned (either vertically, anteriorly, or both), and Type III if it was significantly malpositioned. To evaluate the reproducibility of the classification system, CT scans of 27 knees were obtained from patients scheduled for revision ACL reconstruction, and 3-D reconstructions were created. Four views of the 3-D reconstruction of each femur were then obtained, and inter- and intra-observer reliability was determined following classification of the tunnels by eight observers.

**RESULTS:** Twenty-five tunnels were classified as Type I (5 tunnels), Type II (9 tunnels), or type III (11 tunnels) by at least 5 of 8 observers, while insufficient agreement was noted to classify two tunnels. The inter-observer reliability of tunnel classification as type I, II, or III yielded a  $\kappa$  coefficient of 0.57, while intra-observer reliability yielded a  $\kappa$  coefficient of 0.67. Sub-classification of type II femoral tunnels into the subgroups anterior, vertical, and both was possible in four of the nine type II patients. The inter-observer reliability of the complete classification system yielded a  $\kappa$  coefficient of 0.50, while the intra-observer reliability yielded a  $\kappa$  coefficient of 0.54.

**CONCLUSION:** Classification of the location of ACL femoral tunnels utilizing 3-D reconstructions of CT data yields moderate to substantial inter- and intra-observer reliability.

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### **First detection of chikungunya infection and transmission in Brunei Darussalam**

Liew C, Yung CF.  
Singapore Med J 2012; 53(4) :e66-8.

This report describes the chikungunya cases and local transmission detected in Brunei Darussalam for the first time, despite the country being situated in a region that has experienced a multitude of outbreaks over the years. A combined strategy of active case detection, patient isolation and vector control measures was deployed in an attempt to avert further transmission. The findings have important public health implications for international surveillance and control strategies for this re-emerging disease.

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Email: [cheefu.yung@gmail.com](mailto:cheefu.yung@gmail.com) (Article available from journal website at <http://smj.sma.org.sg/5304/5304cr1.pdf>)

### **Oesophageal ulcers secondary to doxycycline and herpes simplex infection in an immunocompetent patient**

Saravanan T, Telisinghe PU, Chong VH  
Singapore Med J 2012; 53(4) : e69-70.

Oesophageal ulcerations are generally rare occurrences that are most commonly associated with gastroesophageal reflux disorder. Other causes include medications and infections in immunocompromised patients. Among the medications used in daily practice, doxycycline is most commonly implicated. Multiple aetiologies are generally uncommon. We report a case of mid-oesophageal ulcerations secondary to doxycycline and herpes simplex virus infection in an immunocompetent patient.

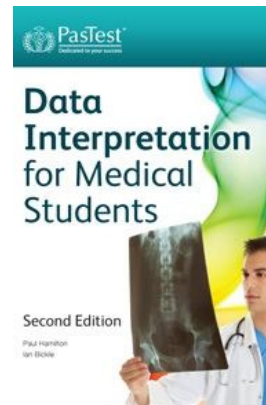
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## **BOOK**

### **Data Interpretation for Medical Students Second edition**

**Hamilton PK & Bickle IC  
Pastest, United Kingdom**

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Data Interpretation for Medical Students approaches the interpretation of all types of clinical data in a subject based approach covering everything from haematology to cardiology to clinical imaging. Complete clinical cases allow readers to then integrate and reinforce learning in all arenas, mimicking the challenging cases in the real world of medicine.

The second edition is a revamped, refreshed and extended edition of Data Interpretation for Medical Students (Pastest, UK) was published in the Spring of 2012.