

Research Digest

Research Digest is a selection of original research done by Malaysian authors. The selection is focused on topics that are felt to be of clinical relevance to primary care physicians. This Research Digest is abstracted by CL Teng (tengcl@gmail.com)

Celecoxib relieves pain marginally better than diclofenac in post-perineal repair and is associated with less upper gastrointestinal symptoms

Lim SS, Tan PC, Sockalingam JK, Siti Zawiah O. Oral celecoxib versus oral diclofenac for post-perineal repair analgesia after spontaneous vaginal birth: a randomised trial. *Aust N Z J Obstet Gynaecol.* 2008;48(1):71-7

Primary author's affiliation: Department of Obstetrics and Gynaecology, Maternity Hospital Penang, Penang, Malaysia

Postnatal mothers with perineal repair were randomised to take either oral celecoxib 200 mg or oral diclofenac 100 mg for pain relief. Main outcome measure was a 10-point visual analog scale (VAS) for pain, at rest and when mobilising. Celecoxib showed a larger reduction of VAS pain score at rest compared to diclofenac ($p=0.044$) but difference in pain score when mobilising was not significant ($p = 0.75$). Mothers randomised to celecoxib reported less upper gastrointestinal symptoms: 23.3% vs 34.5% (relative risk 0.67 95%CI 0.48-0.96, $p=0.029$).

Source of funding: Internal funding by the Department of Obstetrics and Gynaecology, Maternity Hospital, Penang [Personal communication with authors]

HUITAI rapid urease test is highly accurate for the diagnosis of Helicobacter pylori infection

Goh KL, Cheah PL, Navaratnam P, et al. HUITAI rapid urease test: A new ultra-rapid biopsy urease test for the diagnosis of Helicobacter pylori infection. *J Dig Dis.* 2007;8(3):139-42

Primary author's affiliation: Division of Gastroenterology, Department of Medicine, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia

Consecutive patients ($n=206$) presenting with dyspepsia to the endoscopy unit, University of Malaya Medical Centre, were evaluated by HUITAI rapid urease test, homemade urease test, histology and culture of gastric biopsies. A positive diagnosis of *H. pylori* infection was made when the culture was positive or if both histology and the homemade rapid urease test were positive. A negative diagnosis was made when all tests were negative. The sensitivity of the HUITAI rapid urease test was 98.2% (95%CI: 93.7%, 99.8%), specificity, 99.0% (95%CI: 94.2%, 100%), positive predictive value, 99.0% (95% CI: 95.1%, 100%), negative predictive

value, 97.9% (95% CI: 92.6%, 99.7%).

Source of funding: Shanghai Hui-Tai Medical Technology Company and Shanghai Institute of Digestive Disease, Shanghai, China.

Normal platelet count rules out acute dengue nine out of ten times

Tong SF, Aziz NA, Chin GL. Predictive value of thrombocytopaenia in the diagnosis of dengue infection in outpatient settings. *Med J Malaysia.* 2007;62(5):390-3

Primary author's affiliation: Department of Family Medicine, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia

73 adults (age ≥ 12) presenting with acute non-specific fever were evaluated with full blood count at Day 5 of illness. Diagnosis of dengue was confirmed by serology (PanBio IgM and IgG). The test performance of thrombocytopenia ($<150,000/\mu\text{L}$) for the diagnosis of dengue was: sensitivity 88%, specificity 71%, likelihood positive 2.5, likelihood negative 5.2, positive predictive value 55%, negative predictive value 91%.

Source of funding: UKM short term research grant. FF-064-2003 [Personal communication with author]

One in five adult women has FLUTS but only one-quarter of them seek help

Low BY, Liong ML, Yuen KH, et al. Study of prevalence, treatment-seeking behavior, and risk factors of women with lower urinary tract symptoms in Northern Malaysia. *Urology.* 2006;68(4):751-8

Primary author's affiliation: School of Pharmaceutical Sciences, University of Science Malaysia, Penang, Malaysia

FLUTS consisted of persistent lower urinary tract symptoms, including storage symptoms (increased daytime frequency, nocturia, and urgency), voiding symptoms (slow stream, intermittency, and straining), and post-micturition symptoms (feeling of incomplete emptying). 2732 adult women recruited from health campaigns in Penang and Kedah were evaluated with International Prostate Symptom Score, and King's Health Questionnaire. The prevalence of FLUTS was 19.0%, with 88.6% having moderate and 11.4% severe FLUTS. The patterns of treatment-seeking behaviour revealed that only 23.1% of patients with FLUTS actively sought treatment.

Source of funding: Abbott Laboratories Malaysia

Terazosin improves FLUTS and does not cause more side effects than placebo

Low BY, Liong ML, Yuen KH, et al. Terazosin therapy for patients with female lower urinary tract symptoms: a randomized, double-blind, placebo controlled trial. *J Urol.* 2008;179(4):1461-9

Primary author's affiliation: School of Pharmaceutical Sciences, University of Science Malaysia, Penang, Malaysia

100 adult females with FLUTS (total International Prostate Symptom Score 8 or greater, symptom duration 1 or more months) were randomized to receive terazosin or placebo for 14 weeks. Successful treatment outcomes use primary end point of International Prostate Symptom Score quality of life 2 or less.

In the intent to treat analysis, it was found that 72% of terazosin subjects scored 2 or less on I-PSS QOL assessment index vs 52% of placebo subjects at the end of 14-week treatment ($p < 0.05$). Side-effects occurred in 58% and 40% of terazosin and placebo subjects, respectively ($p > 0.05$).

Source of funding: Abbott Laboratories Malaysia

One-third of pregnant mothers are anaemic

Jamaiyah H, Das A, Onn LT, et al. Anemia in pregnancy in Malaysia: a cross-sectional survey. *Asia Pac J Clin Nutr.* 2007;16(3):527-6

Primary author's affiliation: Clinical Research Centre, Kuala Lumpur Hospital, Malaysia

This is multi-centre, cross-sectional study to assess the prevalence of anaemia in 1,072 antenatal mothers from 56 Ministry of Health (MOH) primary health care clinics. The overall prevalence of anaemia was 35% if the cut off level is 11 g/dL and 11% if the cut-off level is 10 g/dL. The majority was of the mild type. The risk factors were: teenage group, Indians and Malays (compared to Chinese), grandmultiparas, the third trimester and urban residence.

Source of funding: Department's operational fund [Personal communication with authors]

Dengue haemorrhagic fever is under-diagnosed

Ng CFS, Lum LCS, Noor Azina I, et al. Clinicians' diagnostic practice of dengue infections. *J Clin Virol.* 2007;40(3):202-6

Primary author's affiliation: Department of Applied Statistics, Faculty of Economics and Administration, University of Malaya, Kuala Lumpur, Malaysia

Case records of 520 adult and 191 paediatric dengue patients from the University of Malaya Medical Centre were reviewed. Features suggestive of dengue haemorrhagic fever [DHF] or dengue shock syndrome [DSS] (thrombocytopenia and evidence of plasma leakage) were present in 8% of adult and 19% of pediatric patients. Of these, 93% and 49%, respectively, were given the discharge diagnoses of DF instead of DHF/DSS, suggesting under-recognition of these conditions by clinicians managing these patients.

Source of funding: Not mentioned.

Parents consult early and prefer private clinics when their children have URTI

Ng CJ, Chia YC, Teng CL, Nik-Sherina H. Factors influencing parental decision to consult for children with upper respiratory tract infection. *J Paediatr Child Health.* 2007;44(4):208-13

Primary author's affiliation: Department of Primary Care Medicine, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia

1033 parents from 65 kindergartens in Gombak were surveyed using self-administered questionnaire. The aim was to study their health-seeking behaviour when their children suffer from URTI. Most parents preferred early medical consultation with a private doctor. Significant proportion of the parents would bring their children to see a doctor immediately if they develop 'runny nose for one day' (65.8%) or have 'fever but still playing' (44.8%).

Source of funding: GlaxoSmithKline (GSK), Malaysia.

Only one in five diabetic patients achieved LDL-C target in Sarawak

Wong JS, Tan F, Lee PY. The state of lipid control in patients with diabetes in a public health care centre. *Asia Pac J Public Health*. 2007;19(3):16-21

Primary author's affiliation: Department of Medicine, Sarawak General Hospital, Kuching, Sarawak, Malaysia

This is a cross-sectional survey in Tanah Puteh Health Centre in Kuching, Sarawak. The lipid profile of 990 patients (98% Type 2 diabetes) were studied. Overall, 22% of patients achieved the treatment target for LDL-C level < 2.6mmol/L. 67% of patients had HDL-C > 1.1 mmol/L and 42% of patients had a target TG level below 1.5 mmol/L. Of the 40% of patients who received lipid-lowering drug, 17% achieved LDL-C target, 50% had LDL-C 2.6-4.4 mmol/L and 33% have LDL-C > 4.0 mmol/L.

Source of funding: Internal funding by clinic [Personal communication with authors]

Safurah J, Mohd Raili S, Fauziah ZE, et al. Using Teleprimary Care (TPC) data set for predicting utilisation of health services in Malaysia through use of John Hopkins ACG (Adjusted Clinical Groups). World Health Organisation (Western Pacific Office), Family Health Development Division (Ministry of Health), John Hopkins Bloomberg School of Public

Related links:

1. JHU ACG Case-Mix System: <http://www.acg.jhsph.edu/>
2. MOH TelePrimary Care Portal: <http://tpc.moh.gov.my/>

Primary author's affiliation: Family Health Development Division, Ministry of Health, Malaysia

This is a collaborative project between Family Health Development Division (MOH) and John Hopkins University aimed to address the lack of information and experience on case mix for ambulatory or outpatients care in Malaysia. The John Hopkins ACG Case Mix system was applied on patients'

records from the TelePrimary Care Program, Klinik Kesihatan Putrajaya and Klinik Alam Medic, a private primary care group practice. The results showed that the Malaysian population does vary in their needs for health care resources, across states, geographic regions and individual clinic level. Comparisons to assess the disease burden and the health care resource needs of the population indicate that morbidity patterns seem to be influenced by age, gender and ethnicity. This project demonstrated the benefits of integrating risk adjustment into the Malaysian health care system and that ACGs could be used to predict future healthcare expenditures. In addition, risk adjusted resource allocation enables budgets to be established on the regional, clinic, and provider level using patient based morbidity profiles.

Source of funding: World Health Organisation.

[This summary is provided by WS Chen]

Three out of seven adult women have female sexual dysfunction

Hatta S, Puteh SE, Abdullah N, Midin M. The prevalence of sexual dysfunction and potential risk factors that may impair sexual function in Malaysian women. *J Sex Med*. 2007; 4(2):311-321.

230 married women (Malay 76%) attending a public primary care clinic in Kuala Lumpur were evaluated using the Malay version Female Sexual Function Index. The prevalence of female sexual dysfunction was 29.6%. The prevalence of women with lack of orgasms, low sexual arousal, lack of lubrication, sexual dissatisfaction, and sexual pain were 59.1%, 60.9%, 50.4%, 52.2%, and 67.8%, respectively. The risk factors for FSD are older age, Malays, married longer, having less sexual intercourse, having more children, married to an older husband, and having a higher academic status. Lack of lubrication is found to be the main predictor for FSD in this study.

Source of funding: Self-funded [Personal communication with authors]