

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

### *Half of the primary care attendees in Kuching use complementary and alternative medicine*

Lee PY, Abang Bennett AT, Lin K, *et al.* Usage of complementary and alternative medicine among primary care clinic attendees, Kuching, Sarawak, Malaysia, January - April 2004. *Asia Pacific Family Medicine*. 2007;6(1).  
 Primary author's affiliation: Universiti Malaysia Sarawak, Sarawak.

This is a cross-sectional survey of 181 attendees (age >15) from three primary care clinics in Kuching, Sarawak for the utilisation of complementary and alternative medicine (CAM). About half of them (51.4%) used CAM. Among the CAM users, the common type of CAM used were massage (36.2%) and herbal medicine (25.1%). Over one-third (37.8%) of these CAM users combined the CAM with medication prescribed by their doctors.

**Editor's note:** Many surveys on the utilisation of CAM among Malaysian patients have been done; below are some of them:

- o Goh E, Tan LC, Chow SK, *et al.* Use of complementary medicine in systemic lupus erythematosus patients in Malaysia. *APLAR Journal of Rheumatology*. 2003; 6(1):21-5.
- o Ismail IA, Chan SC. Knowledge and practice of complementary medicine amongst public primary care clinic doctors in Kinta district, Perak. *Med J Malaysia*. 2004; 59(1):4-10.
- o Jamaiah I, Koh YH, Lubnah H, *et al.* A survey of patients seeking alternative medicine in outpatient clinics. *Journal of the Malaysian Society of Health*. 2000;18:11-20.
- o Mahfudz AS, Chan SC. Use of complementary medicine amongst hypertensive patients in a public primary care clinic in Ipoh. *Med J Malaysia*. 2005;60(4):454-9.
- o Mirnalini K, Lee LC. Dietary supplementation and alternative medicine use among Malaysian cancer survivors. *Asia Pac J Clin Nutr*. 2006;15(Suppl 2):S19.
- o Mokhtar N, Chan SC. Use of complementary medicine amongst asthmatic patients in primary care. *Med J Malaysia*. 2006;61(1):125-7.
- o Nik Hazlina NH, Norlina M, Che Hasanah CI, *et al.* A preliminary report of a study on the psychosocial impact and the use of alternative medicine practices (homeopathy and traditional) on the infertile female. Free Paper 06. 8th IAMANEH World Conference, 21-24 August 2003, Kuala Lumpur, Malaysia.
- o Remli R, Chan SC. Use of complementary medicine amongst diabetic patients in a public primary care clinic in Ipoh. *Med J Malaysia*. 2003;58(5):688-93.
- o Taha AB, Lee PY, Lin K, *et al.* Anxiety and depression in the primary health care clinics and the use of complementary and alternative medicine. *International Medical Journal (Tokyo)*. 2005;12(2):93-7.

### *The Edinburgh Claudication Questionnaire is specific but not sensitive for the detection of peripheral vascular disease diagnosed using the ankle brachial pressure index*

Rabia K, Khoo EM. Is the Edinburgh Claudication Questionnaire a good screening tool for detection of peripheral arterial disease in diabetic patients? *Asia Pacific Family Medicine*. 2007;6(1).

Primary author's affiliation: University of Malaya Medical Centre, Kuala Lumpur

Two hundred diabetic patients (age >18) were evaluated using the Edinburgh Claudication Questionnaire (ECQ). Subsequently ankle brachial pressure index (ABPI) was assessed in all of them; ABPI <0.9 on either leg was diagnosed as having peripheral arterial disease (PAD). The overall prevalence of PAD was 16% (based on ABPI). The ECQ had low sensitivity (25%) but a high specificity (99.4%), with a positive predictive value of 88.9% and a negative predictive value of 88% for diagnosing PAD in patients with diabetes.

### *NS1 antigen-capture ELISA kit has high sensitivity and specificity for the detection of serologically confirmed acute dengue infection*

Kumarasamy V, Wahab AH, Chua SK, *et al.* Evaluation of a commercial dengue NS1 antigen-capture ELISA for laboratory diagnosis of acute dengue virus infection. *J Virol Methods*. 2007;140(1-2):75-9.

Primary author's affiliation: National Public Health Laboratory, Sg Buloh, Kuala Lumpur.

Platelia Dengue NS1 Ag is a commercially available ELISA kit that tests for the unique non-structural protein formed during dengue virus replication. When evaluated based on 224 sera of dengue patients (serologically confirmed), the dengue NS1 antigen-capture ELISA gave an overall sensitivity of 93.4% and a specificity of 100%. The sensitivity was significantly higher in acute primary dengue (97.3%) than in acute secondary dengue (70.0%).

*Biogeneric erythropoietin is therapeutically equivalent to Eprex in haemodialysis patients*

Goh BL, Ong LM, Sivanandam S, *et al*. Randomized trial on the therapeutic equivalence between Eprex and GerEPO in patients on haemodialysis. *Nephrology (Carlton)*. 2007;12(5):431-6. [Full text]

Primary author's affiliation: Serdang Hospital, Selangor.

Eprex, the human recombinant erythropoietin, is well established as a treatment for renal anaemia but is limited by its high cost. In a randomised open-label clinical trial conducted among 186 haemolysis patients in 26 centres in Malaysia, GerEPO (a biogeneric epoetin) was found to be therapeutically equivalent to Eprex at the end of 12 weeks. However, the study duration is too short for safety evaluation.

*Esomeprazole is therapeutically equivalent to pantoprazole for the maintenance treatment of previously healed gastro-oesophageal reflux disease*

Goh KL, Benamouzig R, Sander P, Schwan T. Efficacy of pantoprazole 20 mg daily compared with esomeprazole 20 mg daily in the maintenance of healed gastroesophageal reflux disease: a randomized, double-blind comparative trial - the EMANCIPATE study. *Eur J Gastroenterol Hepatol*. 2007; 19(3):205-211.

Primary author's affiliation: University of Malaya Medical Centre, Kuala Lumpur

1316 endoscopically proven healed gastro-oesophageal reflux disease patients (treated with pantoprazole 40 mg daily) were randomised to receive either pantoprazole 20 mg daily or esomeprazole 20 mg daily for six months. Based on intention-to-treat analysis, 84% and 85% of patients respectively remained in combined endoscopic and symptomatic remission at six months. Both treatments were well-tolerated and safe.

*Corticosteroid injection is more effective for pain relief than autologous blood injection for chronic plantar fasciitis*

Lee TG, Ahmad TS. Intralesional autologous blood injection compared to corticosteroid injection for treatment of chronic plantar fasciitis. A prospective, randomized, controlled trial. *Foot Ankle Int*. 2007;28(9):984-90.

Primary author's affiliation: University of Malaya Medical Centre, Kuala Lumpur

In a randomised, controlled, observer-blinded clinical trial over six months, 64 patients with chronic plantar fasciitis

were randomly allocated to either autologous blood or corticosteroid injection. Pain was assessed using visual analogue scale (VAS) and tenderness threshold (TT). Corticosteroid injection showed significantly lower VAS up to 3 months, and higher TT up to 6 months.

*Celecoxib is as effective as naproxen for pain relief in acute migraine but causes less gastric pain*

Loo CY, Tan HJ, Teh HS *et al*. Randomised, open label, controlled trial of celecoxib in the treatment of acute migraine. *Singapore Med J*. 2007;48(9):834-39 [PubMed] Primary author's affiliation: Hospital Universiti Kebangsaan Malaysia, Kuala Lumpur

This was a randomised, open label, controlled trial. Sixty patients with a diagnosis of migraine, based on the International Headache Society revised criteria, were randomised to take either celecoxib 400 mg (30 patients) or naproxen sodium 550 mg (30 patients). The primary outcome was headache severity (assessed by a visual analogue score) at one hour and two hours after ingestion of trial drugs for the first acute migraine episode during the study period. Patients in both groups showed significant reduction of pain at one and two hours. Although no significant difference in the magnitude of improvement was noted between the two groups, gastric pain was significantly higher in the naproxen sodium group.

*Pipelle device is more efficacious and cost-effective than Vabra aspirator for outpatient endometrial sampling*

Naim NM, Mahdy ZA, Ahmad S, Razi ZR. The Vabra aspirator versus the Pipelle device for outpatient endometrial sampling. *Aust N Z J Obstet Gynaecol*. 2007;47(2):132-6.

Primary author's affiliation: Hospital Universiti Kebangsaan Malaysia, Kuala Lumpur

This is a randomised controlled trial comparing Vabra aspirator and Pipelle device as an outpatient endometrial assessment tool. A total of 147 patients were recruited, of which 71 were in the Vabra group and 76 were in the Pipelle arm. The procedure success rate was in favour of the Pipelle group when compared to Vabra aspirator (98.7 vs 88.7%) and adequate tissue yield was also significantly more in the Pipelle arm (73.3 vs 52.4%). Cost-benefit analysis revealed a higher average cost per patient in the Vabra group compared to the Pipelle arm.

*Increased coital activity does not lead to increased spontaneous labour in pregnant women at term*

Tan PC, Yow CM, Omar SZ. Effect of coital activity on onset of labor in women scheduled for labor induction: a randomized controlled trial. *Obstet Gynecol.* 2007;110(4):820-6.

Primary author's affiliation: University of Malaya Medical Centre, Kuala Lumpur

In this clinical trial, 210 women with a non-urgent labour induction at term were randomised into two groups: advised coitus or neither encouraged nor discouraged regarding coitus. Women assigned to the advised-coitus group were more likely to report coital activity before delivery (60.2% vs 39.6%), but the spontaneous labour rate was no different (55.6% vs 52.0%). Caesarean delivery rate and neonatal and other secondary outcomes were also not different.

*One in two medical students has emotional problems*

Zaid ZA, Chan SC, Ho JJ. Emotional disorders among medical students in a Malaysian private medical school. *Singapore Med J.* 2007;48(10):895-9 [PubMed]

Primary author's affiliation: Royal College of Medicine Perak, Perak.

This is a survey of 253 medical students using General Health Questionnaire (GHQ-12). A cut-off point of 3/4 was regarded as positive for emotional disorder. 46.2% was assessed as possibly emotionally distressed. Statistically significant association was found between positive GHQ scores for emotional disorders and the year of study, pressure faced due to examinations, and not having a romantic relationship.

*Mother's touch has relatively high sensitivity but low specificity for the detection of fever in children*

Teng CL, Ng CJ, Nik-Sherina H, Zailinawati AH, Tong SF. The accuracy of mother's touch to detect fever in children: a systematic review. *J Trop Pediatr* 2007 [Advance Access] [PubMed]

Primary author's affiliation: International Medical University, Negeri Sembilan.

This is a systematic review of 10 diagnostic studies comparing mother's touch versus a thermometer (various types) for the detection of fever in children. The meta-analysis revealed a summary sensitivity of 89.2% and summary specificity of 50%; this suggest that maternal touch is perhaps more useful to exclude fever rather than to 'rule in' fever. The conclusion is somewhat uncertain due to significant heterogeneity in the included studies.

*Two out of five adults aged  $\geq 30$  are hypertensive, three out of four hypertensives on treatment is uncontrolled*

Rampal L, Rampal S, Azhar MZ, Rahman AR. Prevalence, awareness, treatment and control of hypertension in Malaysia: A national study of 16,440 subjects. *Public Health* 2007 [Advance Access] [PubMed]

Primary author's affiliation: Universiti Putra Malaysia, Selangor.

This is population-based survey of adults (aged  $\geq 15$ , n=16,440) in all states of Malaysia in the year 2004. Trained nurses obtained two blood pressure measurements from each subject using mercury sphygmomanometer. Hypertension was defined as mean BP  $\geq 140/90$  mmHg, or a self-reported diagnosis of hypertension or taking antihypertensive medication. The overall prevalence of hypertension for subjects aged  $\geq 15$  and  $\geq 30$  years were 27.8% and 40.5%, respectively. Factors independently associated with hypertension were: older age, males, family history of hypertension, higher body mass index, non-smoking and lower levels of education. Among those taking antihypertensive medication, only 26.8% had their blood pressure under control.