journal review service

Continuing Medical Education in General Practice from the Goodfellow Unit

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Journal Review Service

Continuing Medical Education in General Practice from the Goodfellow Unit

Journals Reviewed in this Issue

Adverse Drug React Bull*
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*Journals indexed in Medline

Acupuncture

28–001 Acupuncture for posttraumatic stress disorder – a randomized controlled pilot trial

Hollifield M, Sinclair-Lian N, Warner TD, et al. J Nerv Ment Dis. June 2007. Vol.195. No.6. p.504-13.
Reviewed by Dr Alex Chan

Review: The effect of acupuncture on patients with post-traumatic stress disorder was compared to that of group cognitive behavioural therapy (CBT) in this trial. A wait-list group was used as control. Points were chosen from LR3, PC6, HT7, ST36, SP6, and Yintang on the front and GB20, BL14, 15, 18, 20, 21, and 23 (all bilaterally) in the back and three out of 15 other 'flexibly prescribed points' according to TCM differential diagnosis. Ear points at Shenmen, Sympathetic, Liver, Kidney and Lung were also stimulated using Vaccaria seeds. Acupuncture sessions lasting one hour were given twice a week and group CBT was conducted once a week for two hours respectively over 12 weeks.

Comment: While acupuncture was found to be as effective as group CBT for reducing symptoms of PTSD, depression, anxiety, and in patients with DSM-IV PTSD even at three-month follow-up, the treatment programme appears to be fairly labour intensive. The findings also have yet to be confirmed by larger trials.

28–002 Acupuncture for chronic shoulder pain in persons with spinal cord injury: a small-scale clinical trial

Dyson-Hudson TA, Kadar P, LaFountaine M, et al. Arch Phys Med Rehabil. October 2007. Vol.88. No.10. p.1276-83.
Reviewed by Dr Alex Chan

Review: The efficacy of acupuncture in the treatment of chronic musculoskeletal shoulder pain in spinal cord injury patients were compared with that of invasive sham acupuncture. For real acupuncture up to six local points and two distal points were chosen according to the distribution of shoulder pain or tenderness on palpation. Also needled were one to four ashi points detected on examination. Sham acupuncture involved shallow insertion of needles at sites at least one cun away from meridian points and extra points with sham manual stimulation given once per session. Both were found to be significantly effective in reducing shoulder pain. There was no significant difference between the two groups though a medium effect size associated with acupuncture treatment suggested that it might be better than sham acupuncture.

Comment: The sham manual stimulation applied in this study is quite similar to that used in Japanese acupuncture where it has been observed to be sufficient to cause immediate changes in the characters of the pulses. Therefore, it is not completely inert. This paper presented a detailed discussion on the pros and cons of different types of sham acupuncture techniques which is well worth reading.

28-003 Effect of oxytocin on acupuncture analgesia in the rat.

Yang J, Yang Y, Chen J-M, et al. Neuropeptides. October 2007. Vol.41. No.5. p.285-92.
Reviewed by Dr Alex Chan

Review: Electrical stimulation of ST36 in rats for 30 minutes increased their pain threshold by 100–110%. Central administration of oxytocin (intraventricularly or intrathecally) enhanced acupuncture analgesia in a dose-related manner while central administration of anti-oxytocin serum had the reverse effect. Intravenous administration of oxytocin or its anti-serum had no influence in either direction. Following acupuncture, elevated oxytocin concentration was found in the hypothalamic suprachiasmatic nucleus, hypothalmic ventromedial nucleus, thalamic ventral nucleus, periaqueductal gray, raphe magnus nucleus, caudate nucleus, thoracic and lumbar spinal cord but not in the plasma.
Comment: A scientific paper in basic acupuncture research to show that something physically happened in the brain and spinal cord post-acupuncture.

28-004 Specific acupuncture sensation correlates with EEGs and autonomic changes in human subjects

Sakai S, Hori E, Umeno K, et al. Auton Neurosci. 30 May 2007. Vol.133. No.2. p.158-69.
Reviewed by Dr Alex Chan

Review: Autonomic functions (BP monitor, ECG, EEG and Electro-oculogram) were recorded continuously before, during and after acupuncture stimulation. Acupuncture manipulation was found to significantly decrease the heart rate and increase systolic blood pressure. Results of data spectral analysis indicated that acupuncture manipulation significantly decreased sympathetic and parasympathetic activities, muscle sympathetic activity, and the balance between sympathetic and parasympathetic outflow. Manipulations inducing acupuncture sensation were associated with decreased sympathetic activity and increased parasympathetic activity response. The theta, alpha and beta band power were increased during and after acupuncture. There was also good correlation between EEG changes and specific acupuncture sensation.
Comment: This study shows that one of the possible mechanisms of acupuncture analgesia could be through reduction of sympathetic activities. This has to be confirmed by repeating the study in patients with chronic pain syndrome.

Asthma

28-005 Modest relief with montelukast for kids' asthma attacks

J Fam Pract. May 2007. Vol.56. No.5. p.348.
Reviewed by Dr Bruce Adlam

Review: In this industry-funded study of 200 children aged two to 14 years with intermittent asthma and three to six significant exacerbations per year, montelukast, when given at the first sign of an exacerbation or an upper respiratory infection, was slightly better than placebo in relieving symptoms and reducing health care use (the children using montelukast sought health care 163 times, compared with 228 times for those using placebo). The children in this study were not taking controller medications. It's not clear from this study whether montelukast is better than steroids, or if this approach is effective for children who are taking controller medications. Level of evidence: 2b: individual cohort study (including low-quality RCT). (Original article reviewed: Am J Respir Crit Care Med 2007; 175: 323-329.)
Comment: The symptom scores were slightly improved for the children taking montelukast. The episodes lasted, on average, approximately one week in each group. There was no difference in hospitalisations, the use of beta-agonists, or the use of prednisone.

28-006 Are any alternative therapies effective in treating asthma?

Hayes M, Buckley D, Judkins DZ. J Fam Pract. May 2007. Vol.56. No.5. p.385-7.
Reviewed by Dr Bruce Adlam

Review: Yes, some are. Acupuncture relieves subjective symptoms of asthma and reduces medication use in mild to moderate asthma (strength of recommendation = A,

based on systematic review of randomised controlled trials [RCTs] of variable quality). Herbal medications, such as Ginkgo biloba, appear to improve lung function, while herbs such as Tylophora indica and Tsumura saiboku-to may decrease asthma symptoms (SOR = B, based on systematic review of RCTs with poor methodology). No evidence, however, supports the use of room air ionizers, manual therapy, homeopathy, or mind-body therapy for treatment of asthma (SOR = A, based on systematic reviews and meta-analyses of RCTs and individual RCTs).
Comment: Interesting research and it will be interesting to see how this might be incorporated into future guidelines. Those GPs interested in alternative therapies will find the full article useful.

Biochemistry

28-007 Food additives and hyperactive behaviour in 3-year-old and 8/9-year-old children in the community: a randomised, double-blinded, placebo-controlled trial.

McCann D, Barrett A, Cooper A, et al. Lancet. 3-9 November 2007. Vol.370. No.9598. p.1560-7.
Reviewed by Dr Tony Hanne
Review: Two different mixes of various food colourings, both of which also contained sodium benzoate, a preservative, were compared with placebo in hyperactive children. The effect on behaviour was rated by parents, teachers and for the older children, a computer test of attention. Both mixes substantially increased hyperactivity in both groups of children although there were noticeable differences in the reaction of individual children.
Comment: This well-designed study anticipated many of the variables such as extent of hyperactivity, age, social background and previous diet which have caused doubt to be cast on some previous trials. The evidence is strong although different food colourings affect different children to varying extents. The case for avoiding these substances in ADHD children as part of an overall package of care which may include medication is considerably strengthened. (See 28-008 for associated Comment.) Editorial note: Erratum is attached.

28-008 Food colourings, preservatives, and hyperactivity

Eigenmann PA, Haenggeli CA. Lancet. 3-9 November 2007. Vol.370. No.9598. p.1524-5.
Reviewed by Dr Tony Hanne
Review: See 28-007.

Cardiovascular System

28-009 Initiation of therapy for patients with essential hypertension or comorbid conditions

Wexler R, Feldman D. Prim Care. December 2006. Vol.33. No.4. p.887-901.
Reviewed by Dr Michael Hewitt
Review: Hypertension is defined as systolic greater than 140mm Hg and diastolic in excess of 90mm Hg. Once identified, other risk factors come into play. The condition, if untreated, has significant costly consequences for the 'individual' concerned and for society as a whole.
Comment: Very much worth the effort and totally in the domain of the primary care physician.

28-010 Common questions in managing hyperlipidemia

Rosen IM, Sams II RW. Prim Care. December 2006. Vol.33. No.4. p.903-21.
Reviewed by Dr Michael Hewitt
Review: Who should be treated? What are acceptable treatment goals? What aspects of individual variations should be focussed on and taken most notice of? How many different things (i.e. drugs, exercise, diet) can we try all at once or separately?
Comment: The wisest men ask the questions, but evidence-based studies provide the answers. Note: The measurements are all in mg/dL and not mmol/L.

28-011 Drug-induced systemic hypertension

Coleman JJ, Martin U. Adverse Drug React Bull. August 2006. No.239. p.915-8.
Reviewed by Damien Hannah
Review: Types of medication that can induce hypertension or exacerbate pre-existing hypertension are reviewed. Classes of drugs are considered in a reasonably comprehensive manner, giving some consideration to the mechanisms involved. Drugs causing rebound hypertension following discontinuation are also included. Some alternative drugs and management strategies are also considered.
Comment: Perhaps not a comprehensive review of all drugs associated with this problem, but a good revision of the usual suspects: NSAIDs, glucocorticoids, salt, and drugs used in psychiatry. A useful review for anyone with hypertensive patients on multiple medications.

28-012 Venous thromboembolism: AAFP and ACP issue new practice guidelines. What is the best diagnostic strategy?

J Fam Pract. May 2007. Vol.56. No.5. p.350.
Reviewed by Dr Bruce Adlam
Review: Key points: (a) Use a validated clinical prediction rule, like the Wells prediction rule to estimate the clinical likelihood of VTE. (b) Order a high-sensitivity D-dimer test for patients with a low clinical likelihood of VTE. A negative test result confirms that the patient is unlikely to have a VTE. (c) Perform an ultrasound of the lower extremities of patients with an intermediate to high clinical likelihood of VTE. Ultrasound sensitivity (89%–96%) and specificity (94%–99%) in diagnosing symptomatic proximal vein lower extremity thrombosis. (d) Order diagnostic imaging studies for patients with intermediate or high clinical likelihood of pulmonary embolism. (Original article reviewed: Ann Fam Med 2007; 5: 57-62.)
Comment: Ultrasound is less sensitive in diagnosing asymptomatic thromboses (47%–62%).

28–013 Venous thromboembolism: AAFP and ACP issue new practice guidelines. What is the best management strategy?

J Fam Pract. May 2007. Vol.56. No.5. p.351.

Reviewed by Dr Bruce Adlam

Review: Key points: (a) Unfractionated or low-molecular-weight heparin (LMWH) are appropriate for the initial treatment of pulmonary embolism, however, start with LMWH whenever possible. (b) Patients with deep vein thrombosis and possibly pulmonary embolism can be managed safely and cost-effectively as outpatients under the right circumstances. (c) Use compression stockings for at least one year to prevent post-thrombotic syndrome. (d) Maintain anticoagulation (warfarin) for three to six months for those with first-time VTE or VTE due to transient risk factors. (e) Treat patients with recurrent VTE for >12 months. (f) LMWH and vitamin K antagonists have comparable effectiveness for long-term treatment of VTE and may be preferable for patients with cancer. (Original article reviewed: Ann Fam Med 2007; 5: 74-80.)

28–014 Should you add aspirin to your heart patient's warfarin regimen?

J Fam Pract. June 2007. Vol.56. No.6. p.430.

Reviewed by Dr Bruce Adlam

Review: No, it does not reduce the risk of death or thromboembolism in patients with atrial fibrillation or coronary artery disease. It does, however, benefit patients with mechanical heart valves (Odds ratio=0.27; 95% CI 0.15, 0.49) (Level of evidence 1a.). Overall, major bleeding was more likely to occur when the combination was used (number needed to harm = 100). Mortality due to any cause was not reduced by the addition of aspirin. (Original article reviewed: Arch Intern Med 2007; 167: 117-124.)

28–015 Which lifestyle interventions effectively lower LDL cholesterol?

Powers E, Saultz J, Hamilton A. J Fam Pract. June 2007. Vol.56. No.6. p.483-5.

Reviewed by Dr Bruce Adlam

Review: Weight loss, exercise, one to two daily drinks of alcohol and counselling to improve compliance with medications lowers LDL-cholesterol. Exercise significantly lowers LDL-C (SOR=A). Smoking cessation may have a beneficial effect (SOR=B). Exercise-based alternative practices (yoga and tai chi) lower LDL, and meditation may have a beneficial effect (SOR=C) but there is insufficient evidence to prove that it reduces mortality/morbidity.

Comment: This review has a huge bibliography.

Dermatology

28–016 The safety of tacrolimus ointment for the treatment of atopic dermatitis: a review.

Rustin MH. Br J Dermatol. November 2007. Vol.157. No.5. p.861-73.

Reviewed by Dr Shane Reti

Review: A wide ranging review of this product suggesting no evidence for local or systemic side effects, and generally well tolerated in atopic dermatitis.

28–017 Can automated dermoscopy image analysis instruments provide added benefit for the dermatologist? A study comparing the results of three systems

Perrinaud A, Gaide O, French LE, et al. Br J Dermatol. November 2007. Vol.157. No.5. p.926-33.

Reviewed by Dr Shane Reti

Review: A comparison of three commercially available automated dermoscopy instruments against clinical diagnosis in 107 lesions concluded *'Although the image analysis systems tested by us correctly identified the clinically obvious melanomas, they were not able to discriminate between most dysplastic naevi and early malignant melanoma. Thus, for the moment these computer-assisted diagnostic imaging machines provide little to no added benefit for the experienced dermatologist/dermoscopist.'*

Comment: Technology is definitely advancing in this area but not yet reliable.

28–018 Pityriasis lichenoides: the differences between children and adults

Wahie S, Hiscutt E, Natarajan S, et al. Br J Dermatol. November 2007. Vol.157. No.5. p.941-5.

Reviewed by Dr Shane Reti

Review: Traditionally, two clinical forms are described: pityriasis lichenoides et varioliformis acuta (PLEVA) and pityriasis lichenoides chronica (PLC). PLEVA is characterised by a generalised eruption of acute onset, consisting of papular lesions that develop central necrosis and scar. In contrast, PLC is typified by small scaly red papules that do not evolve into necrotic lesions. This study suggests that, compared with adults, PL in children is more likely to run an unremitting course, with greater lesional distribution, more dyspigmentation and a poorer response to conventional treatment modalities.

Comment: PLEVA can be a difficult diagnosis, the sort of 'chickenpox' that doesn't get better pattern. PLC can also be hard to differentiate from other erythematosquamous conditions. Management in both is symptomatic, along the lines of how one would manage an excematous condition, but, clearly the course in children is more prolonged and cutaneously involved.

28–019 Admissions to a U.K. teaching hospital with nonnecrotizing lower limb cellulitis show a marked seasonal variation.

Haydock SF, Bornshin S, Wall EC, et al. Br J Dermatol. November 2007. Vol.157. No.5. p.1047-8.

Reviewed by Dr Shane Reti

Review: In New Zealand we see the progression from impetigo/trauma/itching to cellulitis commonly over

the summer months. This was also the finding of the data analysis in this UK study and was considered to be due to 1. Sweating/itching, 2. Venous congestion, 3. Gardening/trauma.
Comment: Interesting that there are some European studies that do not show this seasonal correlation.

28–020 Sock–line bands in infancy

Berk DR, Bayliss SJ. Br J Dermatol. November 2007. Vol.157. No.5. p.1063-4.
Reviewed by Dr Shane Reti
Review: Doctors Berk and Bayliss write: *'We recently reported five infants with sock-line hyperpigmentation, a newly described condition characterized by acquired, linear, circumferential or partially circumferential hyperpigmentation in a sock-line distribution. We hypothesized that tight elastic bands of socks or pant legs may cause inflammation in the dermis or fat, which may heal with postinflammatory changes resembling sock lines.'*
Comment: References are given for further reading.

28–021 The 'handprint' approximates to 1% of the total body surface area whereas the 'palm minus the fingers' does not.

Thomas CL, Finlay AY. Br J Dermatol. November 2007. Vol.157. No.5. p.1080-1.
Reviewed by Dr Shane Reti
Review: There is an inherent problem with the term 'palm' as it can mean either the entire palmar surface of the hand, or the palmar surface excluding the five digits, or the palmar surface with the thumb but not the four fingers. We have previously proposed the term 'handprint', analogous to a 'footprint', to get over the difficulties with the term 'palm'. The 'handprint' is the surface area of the whole palmar surface of the flat hand, including the palm and all five digits, with the digits closed together rather than spread. Thus defined, the 'handprint' of the patient does approximate to 1% of their total BSA in children and just <1% of total BSA in adults.
Comment: A good reminder of the exact definition of a rule of thumb.

28–022 Bath emollients for atopic eczema: why use them?

Drug Ther Bull. October 2007. Vol.45. No.10. p.73-5.
Reviewed by Fiona Corbin
Review: This review examines the evidence for the clinical contribution of bath emollients, as distinct from emollients applied directly to the skin, in the treatment of people with atopic eczema. In fact, according to this article, there is no published evidence from randomised controlled clinical trials evaluating the efficacy of bath emollients in the treatment of patients with atopic eczema. In addition while there is a reported consensus among clinicians (as well as limited supporting data from a recently published randomised controlled trial) to indicate that emollients applied directly to the skin are effective, the same cannot be said of bath emollients. The authors report that some clinicians surveyed question the view that bath emollients are an essential component in the treatment of patients with atopic eczema.
Comment: This article challenged some of my personal previously held beliefs and understanding on the topic and will influence my clinical decisions going forward.

Diabetes

28–023 Self –monitoring of blood glucose in diabetes

Drug Ther Bull. September 2007. Vol.45. No.9. p.65-9.
Reviewed by Fiona Corbin
Review: In pursuit of tight glycaemic control while avoiding hypoglycaemia, self-monitoring of blood glucose levels is widely acknowledged as a routine part of management in patients with type 1 diabetes. On the other hand the evidence for a benefit is not as clear-cut in patients with type 2 diabetes. This, coupled with the significant cost of monitoring products for health care providers, has led to guidelines and recommendations restricting self-monitoring, particularly in the case of type 2 diabetes. This article reviews the data underpinning these recommendations and guidelines.
Comment: In the New Zealand context Pharmac has placed targeted but limited restriction on subsidised supplies of blood glucose testing strips, which, in light of the evidence presented in this review, is an appropriate and responsible decision.

Diagnosis

28–024 Oral glucose tolerance test in the assessment of glucose–tolerance in the elderly people

Stevic R, Zivkovic TB, Erceg P, et al. Age Ageing. July 2007. Vol.36. No.4. p.459-62.
Reviewed by Fiona Corbin
Review: The researchers assessed glucose tolerance in healthy, non-obese, moderately active elderly subjects (aged 60–90 years) using a 75g oral glucose tolerance test (OGTT).
Comment: Although this is really nothing new, the study described is straightforward and the research letter itself is easy to read and assimilate – nice!

28–025 Can you differentiate bacterial from viral pediatric infections based on the CBC?

Zakaria S, Stephens M, Smith WR, et al. J Fam Pract. May 2007. Vol.56. No.5. p.390-2.
Reviewed by Dr Bruce Adlam
Review: No – the complete blood count (CBC) alone does not have adequate sensitivity or specificity to tell bacterial from viral infections (Strength of Recommendation = B, cohort studies). Bottom line from these authors is that there's no substitute for history, physical exam, and good judgment. When used in conjunction with other clinical parameters in validated decision-making algorithms, the CBC can help detect serious bacterial infections in paediatric patients with fever.
Comment: Really interesting article.

Education

28-026 Problem-based learning in sports medicine: the way forward or a backward step?

Franklyn-Miller A, Falvey E, McCrory P. Br J Sports Med. 1 October 2007. Vol.41. No.10. p.623-4.

Reviewed by Dr Chris Milne

Review: Self-directed problem-based learning is being used increasingly in undergraduate courses. As the graduates of these courses progress onto specialist level training, their relative lack of knowledge of anatomy can be a limitation in specialties where this is important (e.g. musculoskeletal and sports medicine).

Comment: These authors propose a four-step compartmentalisation of the diagnostic process, taking the best of the traditional approach advocated by Sir William Osler, adding some newer innovations.

Endocrinology

28-027 Hormone replacement therapy

Dull P. Prim Care. December 2006. Vol.33. No.4. p.953-63.

Reviewed by Dr Michael Hewitt

Review: A careful review and discussion of the evidence-based studies relating to HRT. The authors are very much aware of the recent publicised criticism of HRT and carefully outline risks versus benefits.

Comment: Benefits still outweigh the risks, but the onus is on the individual primary care provider to 'tailor' the remedy to those in whom it will do the most good and the least harm.

Ethics

28-028 Experimental drugs on trial

Benderly BL. Sci Am. October 2007. Vol.297. No.4. p.66-73.

Reviewed by Dr Ron Vautier

Review: An appeal has been made to the US Supreme Court regarding granting dying patients greater access to experimental drugs. The FDA's position is that it would be wrong to abandon the principle that only rigorous large clinical trials can determine the effectiveness and safety of new drugs. The time required for such trials means that some patients will die waiting for approval to be granted for drugs that could have saved them, and the appellants argue that a person with a serious illness has the right, after proper counselling from expert medical professionals, to decide for himself whether to try the experimental drug.

Comment: These sorts of issues also come in to consideration when 'alternative' therapies are being advised upon, and I guess it boils down to how 'scientific' we are as individual practitioners. This article deserves some attention for casting light in that direction.

Evidence-Based Medicine

28-029 An introduction to evidence-based medicine

Miser WF. Prim Care. December 2006. Vol.33. No.4. p.811-29.

Reviewed by Dr Michael Hewitt

Review: The author challenges health care providers to use and incorporate best management and treatment of conditions with recognised current thinking. The process for recommendation is based on critical evaluation of research and methodology, rather than personal experience.

Comment: I feel that the personal experience component is complementary to the process, if one continues to critically evaluate what one does.

28-030 Evolving medical knowledge: moving toward efficiently answering questions and keeping current

McConaghy JR. Prim Care. December 2006. Vol.33. No.4. p.831-7.

Reviewed by Dr Michael Hewitt

Review: The author considers the information needs of health care providers is largely unmet, despite increases in volume of material available for evaluation. The key is to become selectively proficient and at the same time use the best methods and resources to assist in the process.

Comment: The author recognises and acknowledges the massive task of keeping up-to-date, given the volume of information available.

28-031 Finding truth from the medical literature: how to critically evaluate an article

Miser WF. Prim Care. December 2006. Vol.33. No.4. p.839-62.

Reviewed by Dr Michael Hewitt

Review: The author advises readers how to respond to the information 'overload' with key pieces of advice enabling the physician to critically evaluate articles, reviews and original research.

Comment: Aha, so that is what I was supposed to be doing all these years. Relevance, validity and usefulness are all in the eyes of the beholder and 'end-user' of the product.

Gastroenterology

28-032 Effectiveness of a practice-based, multimodal quality improvement intervention for gastroenteritis within a medicaid managed care network

Zolotor AJ, Randolph GD, Johnson JK, et al. Pediatrics. September 2007. Vol.120. No.3. p.e644-e50.

Reviewed by Dr Jocelyn Tracey

Review: In this study, three practices formed interdisciplinary teams to develop and test changes in the way they managed children with gastroenteritis, with collaboration with each other and specialist input. Seventeen practices benefited from their learning via a teleconference call and tool kit. Gastro admissions declined 45% in the high intervention practices and 44% in the low intensity intervention practices and 11% in controls.

Comment: A cost-effective educational intervention, especially for the low intervention group.

28–033 Prevention of NSAID gastropathy in elderly patients. An observational study in general practice and nursing homes

van Leen MW, van Der Eijk I, Schols JM. Age Ageing. July 2007. Vol.36. No.4. p.414-8.
Reviewed by Fiona Corbin

Review: Based on the frequent use of Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) and their propensity to cause adverse drug reactions and related hospital admissions, Dutch researchers designed this study to: (a) survey the risk factors for NSAID gastropathy in elderly (>65 years old) community-based patients compared to those living in residential facilities; (b) to determine whether the prescription of medical prophylaxis during NSAID use conformed to the current national guidelines, and (c) to survey the efficacy and safety of pantoprazole 20mg as prophylaxis for NSAID gastropathy. The study design is described as *'an open observational study following a real-life design (current daily practice)'*, and was conducted with 181 randomly invited general physicians and 615 of their patients in the Netherlands between April 2003 and March 2005. The results showed that patients older than 65 years living in nursing homes had more risk factors for NSAID gastropathy than elderly living independently or in old people's homes. Also that, contrary to existing Dutch national guidelines, 62.3% of all study patients who used an NSAID were not prescribed gastrointestinal prophylaxis. Thirdly, gastric complaints possibly caused by NSAIDs are effectively diminished by pantoprazole.

Comment: This research was performed with the support of the Dutch company sponsor of pantoprazole. Although the conflicts of interest state there was no interference with the results, it raises the question of publication bias of such studies. The authors' finding that national guidelines have not been fully implemented is not unusual in studies examining this type of issue. It would be interesting to look at local data to determine extent of adherence to congruent New Zealand guidelines relating to gastro-protection for NSAID use in the elderly.

Geriatrics

28–034 Multi-modal exercise programs for older adults

Baker MK, Atlantis E, Singh MA. Age Ageing. July 2007. Vol.36. No.4. p.375-81.
Reviewed by Fiona Corbin

Review: The authors note that various modalities of exercise have been demonstrated to improve physical function and quality of life in older adults and current guidance stresses the importance of multi-modal exercise for this cohort. This paper describes a critical review of the evidence to determine whether simultaneously prescribed doses and intensities of strength, aerobic, and balance training in older adults are both feasible and capable of improving functioning and quality of life. Fifteen randomised controlled trials involving adult cohorts with a mean age >60 years, limited to published studies in English were included. The reviewers conclude that the limited data available suggests that multimodal exercise has a small effect on physical, functional and quality of life outcomes. In addition, five out of six studies investigating fall rates found a significant reduction associated with the intervention – so multimodal exercise programmes may be seen as effective treatment for preventing falls in older people.

Comment: The findings of this review feel intuitively correct. However, real world results rely on the availability of suitable exercise programmes to offer the elderly. I'm also not sure that feasibility and adherence in the real world are as achievable as suggested in the studies comprising this review.

28–035 Health conditions, health symptoms and driving difficulties in older adults.

Tuokko HA, Rhodes RE, Dean R. Age Ageing. July 2007. Vol.36. No.4. p.389-94.
Reviewed by Fiona Corbin

Review: The stated aim of the study is to establish the mechanisms through which health conditions affect driving difficulties in older adults. The researchers used data obtained from telephone surveys of randomly selected >60-year-olds in Canada.

Comment: The authors state in the discussion *'the results suggest that health symptoms are more strongly related to driving difficulties than are health conditions'* – not really earth-shattering research from my perspective. The study's methodological limitations are not considered and the data analysis and presentation of results are somewhat inaccessible. This is another paper in this particular issue of *Age & Ageing* that at first glance looked as if it may have practical relevance for general practice yet failed to live up to the initial promise.

Gynaecology

28–036 Metformin and glitazones: do they really help PCOS patients?

Pillai AS, Bang H, Green C. J Fam Pract. June 2007. Vol.56. No.6. p.444-53.
Reviewed by Dr Bruce Adlam

Review: While the use of metformin and thiazolidenediones in treating PCOS patients is fairly common, this review revealed little evidence-based support for the practice. There is no evidence to support the routine use of either metformin or a thiazolidenedione as first-line therapy for treatment of polycystic ovarian syndrome. (SOR = C). Apparently diet and exercise are a better approach to PCOS treatment. A weight reduction of as little as 5% can help regulate the menstrual cycle and improve fertility, decrease insulin resistance, and reduce associated symptoms and comorbidities. (SOR = B)

Comment: Quite a good review article written simply and clearly.

Immunology and Allergy

28-037 Risk of serious neurologic disease after immunization of young children in Britain and Ireland

Ward KN, Bryant NJ, Andrews NJ, et al. Pediatrics. August 2007. Vol.120. No.2. p.314-21.
Reviewed by Dr Jocelyn Tracey

Review: This three year prospective, self-controlled case-series study identified 157 children with encephalitis and convulsions and linked those to their vaccine history. There was a slight increased risk of fever and convulsions after MMR, with complete recovery in all but one case. They concluded that the estimated attributable risk of serious neurological disease was similar to previous studies of measles vaccine.
Comment: Another reassuring study for the safety of vaccines

28-038 The role of self-tests in the diagnosis of hair dye allergy

White JM, White IR. Br J Dermatol. November 2007. Vol.157. No.5. p.847-8.
Reviewed by Dr Shane Reti

Review: Colourstart® (Trichocare, Ridgmont, Beds, UK), a hair dye allergy self-testing package in the UK was assessed for the sensitivity of Colourstart® in eight subjects known to be hair dye allergic. Although this study is small, its results suggest that Colourstart® does not identify all those with allergy to p-phenylenediamine (PPD; the most important hair dye allergen), with four of seven Colourstart® reactions being false negatives. Colourstart® is not designed to identify other hair dye allergens (with the exception of resorcinol) and is hence potentially liable to mislead consumers into thinking that they are not at risk of an allergic reaction on dyeing the hair. Active sensitisation by patch testing, although uncommon, may potentially lead to an increased public health problem. Active sensitisation to PPD is as low as 03%, but 70% of women in developed countries dye their hair. If all women who dye their hair were to perform a self-test for hair dye allergy only once, there could be 62 000 women actively sensitised by the test procedure in the UK (according to population data from the 2001 census).
Comment: I haven't seen this product in NZ but there probably needs to be some caution around its usefulness.

Musculoskeletal System

28-039 Assessment of diclofenac or spinal manipulative therapy, or both, in addition to recommended first-line treatment for acute low back pain: a randomised controlled trial

Hancock MJ, Maher CG, Latimer J, et al. Lancet. 10-16 November 2007. Vol.370. No.9599. p.1638-43.
Reviewed by Dr Tony Hanne

Review: There were four parts to this Australian general practice-based study. One group with acute low back pain were given standard counselling in remaining active and good back care plus paracetomol only. A second group had diclofenac added. A third group had the addition of spinal manipulation by trained physiotherapists using a variety of techniques. The final group added both diclofenac and manipulation. There was no difference in outcome among the four groups. Nor was there any difference in side-effects although it is acknowledged that both diclofenac and manipulation can have adverse consequences. See also 28-040.

28-040 Evidence-based management of acute low back pain

Koes BW. Lancet. 10-16 November 2007. Vol.370. No.9599. p.1595-6.
Reviewed by Dr Tony Hanne

Review: See also 28-039.

Neurology

28-041 Drug-induced headache

Butt TF, Evans B. Adverse Drug React Bull. October 2006. No.240. p.919-22.
Reviewed by Damien Hannah

Review: Examines drug-induced headache, classified by the International Headache Society as *'Headaches attributed to a substance or its withdrawal'*. The condition is further subdivided into four categories: headache induced by acute substance use, medication-overuse, adverse effect attributed to chronic medication, and headache attributed to substance withdrawal. Presenting symptoms, their temporal relationship to the offending medication and, where possible, the underlying mechanism for the headache are considered. Drugs frequently associated with headache and migraine are listed.
Comment: The reports citing the drugs most commonly associated with headache are surprisingly old (1972–1987) and are not comprehensive. Rather than a reference for drugs likely to cause headache, the review is perhaps more useful as a framework for consideration of temporal relationships and subsequent management of drug-induced headache.

28-042 Serotonin syndrome

Thanacoody RH. Adverse Drug React Bull. April 2007. No.243. p.931-4.
Reviewed by Damien Hannah

Review: This article reviews the mechanism underlying serotonin

syndrome and the types of medication which may cause it. The syndrome is described and tabulated diagnostic criteria are included. Classes of drugs that cause increased intra-synaptic serotonin activity are considered. These are also presented in a useful table. A brief section on management of the syndrome is also included.
Comment: A good concise review relevant to all GPs. Interactions between drugs with serotonergic effects are considered but indirect interactions such as those mediated by CYP450 are not considered.

28–043 How does consciousness happen?

Koch C. Sci Am. October 2007. Vol.297. No.4. p.50-7.
Reviewed by Dr Ron Vautier
Review: This article consists of a debate between two leading neuroscientists as to what in general terms is going on in our brains when we experience the subjective feeling of consciousness. According to Koch, for each conscious experience a unique set of neurons in particular regions fires in a specific manner, while in Greenfield's version neurons across the brain synchronise into coordinated assemblies, then disband.
Comment: Through evolving technology, what in the past has been largely a philosophical question is gradually becoming amenable to scientific analysis, but it seems that it remains largely unanswered.

Nutrition

28–044 Cell defenses and the sunshine vitamin

Tavera-Mendoza LE, White JH. Sci Am. November 2007. Vol.297. No.5. p.62-72.
Reviewed by Dr Ron Vautier
Review: By current estimates more than a thousand different genes in bone, brain, breast, fat, intestine, kidneys, liver, nerves, pancreas, parathyroid, prostate, skin, and the immune system are regulated by vitamin D. Regarding immune function, vitamin D plays a role in fighting infections, in damping down excessive inflammation, and in reducing cancer risk. Some of the mechanisms involved are illustrated. In temperate regions of the world many people have levels of vitamin D that are below the optimal concentration for health, particularly during winter. It appears that many should have their diets supplemented, but there is still debate about how much they should take.
Comment: There is a lot of very important information in this article and I must recommend it highly to all clinicians whoever advise patients about diet and sun exposure.

28–045 Atkins, Zone, Ornish or LEARN – which diet kept weight off?

Gardner CD, Kiazand A, Alhassan S et al. J Fam Pract. June 2007. Vol.56. No.6. p.434.
Reviewed by Dr Bruce Adlam
Review: In this government-funded study, the Atkins group lost more mean weight (-4.7 kg; 95% CI, -6.3, -3.1 kg) than the Zone (-1.6 kg; CI-0.8, -0.4 kg), LEARN (-2.2 kg; CI -3.6, -0.8 kg) and Ornish (-2.6 kg; -3.8 to -1.3 kg) groups. The difference between the Atkins and Zone diets was statistically significant, but no other differences between any of the diets were significant. The Atkins group also saw significant reductions at one year in low-density lipoprotein cholesterol, but not high-density lipoprotein cholesterol and systolic blood pressure. No significant differences in insulin levels or fasting glucose levels were seen in any group. Weight loss was greatest at six months for all diets, with many patients regaining some weight at one year. (Original article reviewed: JAMA 2007; 297: 969-977.)

Oncology

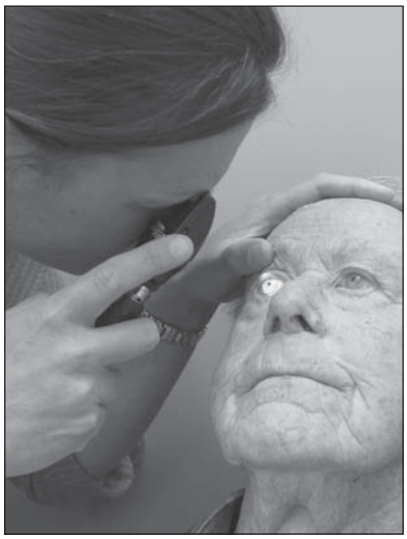
28–046 Components of the metabolic syndrome and colorectal cancer risk; a prospective study

Stocks T, Lukanova A, Johansson M, et al. Int J Obes. 18 September 2007. Vol.Advanced online publication.
Reviewed by Dr Anne-Thea McGill
Review: The study researchers performed case control studies (three sub-studies) of 306 colorectal cancer cases and 595 matched controls (nested). They recorded a number of metabolic syndrome markers and plasma cardiovascular risk factors and prospectively related these to colon cancer incidence. Presence of obesity, hypertension and hyperglycaemia significantly increased the risk of colorectal cancer; odds ratio for three vs null factors was 2.57 (95% Confidence Interval [CI] 1.20-5.52; P=0.0021). For HbA1c and the Leptin/adiponectin ratio, only high levels increased risk significantly. The combinations of factors increased risk, although continuous risk over quartiles was not seen.
Comment: Most people now know that obesity increases cancer risk generally, and it is clear that the metabolic clustering of risk factors emphasises this. Notably, these studies, dating from 1985, did not use waist circumference and may well have shown still higher colon cancer risk levels if they had.

Ophthalmology

28–047 Drug-induced ophthalmic adverse reactions

Cox AR, Gilmartin B. Adverse Drug React Bull. December 2006. No.241. p.923-6.
Reviewed by Damien Hannah
Review: Important adverse drug-reactions (ADRs) that are evident in the eye are examined. Detection of ocular ADRs are complicated by the effects of ageing and underlying disease processes. A wide variety of adverse effects are considered according to their effects on the lacrimal apparatus, the cornea, the lens, intraocular pressure and the retina and optic nerve. The importance of case reports as a primary source of safety information is discussed.



Comment: A good concise review which, despite its brevity, addresses the clinical significance of a wide variety of ocular ADRs.

Orthopaedics

28-048 Family history predicts stress fracture in active female adolescents

Loud KJ, Micheli LJ, Bristol S, et al. Pediatrics. August 2007. Vol.120. No.2. p.e364-e72.
Reviewed by Dr Jocelyn Tracey
Review: This study looked for predictors of stress fractures in adolescents. They discovered that those with a family member with osteoporosis or osteopenia were three times more likely to have a stress fracture.
Comment: Check the family history of female adolescents.

28-049 Osteoporosis

Rizer MK. Prim Care. December 2006. Vol.33. No.4. p.943-51.
Reviewed by Dr Michael Hewitt
Review: The authors carefully define what is meant by osteoporosis and then proceed to discuss the factors which predispose to its development.
Comment: Much of which we already know, including the costs.

28-050 Surgery – not sling – better for first-time shoulder dislocation

J Fam Pract. May 2007. Vol.56. No.5. p.345.
Reviewed by Dr Bruce Adlam
Review: Primary open surgical repair for patients ages 15 to 39 (n=80) who had a first-time traumatic anterior shoulder dislocation resulted in fewer subsequent dislocations (9% vs 62%); less instability, and improved patient satisfaction. Overall, 72% of those in the surgical group reported good or excellent results, while 74% in the control group reported unsatisfactory results. (Original article reviewed: Arthroscopy 2007; 23: 118-123.)
Comment: This is a major change from current standard of care (conservative therapy for first dislocations and surgery for recurrent dislocations only). Level of evidence 1b.

Paediatrics

28-051 Restless legs syndrome: prevalence and impact in children and adolescents – the Peds REST study

Picchietti D, Allen RA, Walters AS, et al. Pediatrics. August 2007. Vol.120. No.2. p.253-66.
Reviewed by Dr Jocelyn Tracey
Review: An Internet survey of 10 523 families in UK and USA found a prevalence of restless leg syndrome

in eight to 11-year-olds of 1.9% and 2% in 12–17-year-olds. It occurred more commonly in those with diabetes or epilepsy. It was associated with poor sleep. (See also 28-052.)
Comment: Think 'restless legs syndrome' as well as 'growing pains'!

28-052 Restless legs syndrome: what is a pediatrician to do?

Blum NJ, Mason TB. Pediatrics. August 2007. Vol.120. No.2. p.438-9.
Reviewed by Dr Jocelyn Tracey
Review: These two paediatricians respond to the above article (see 28-051), with a caution as to getting the diagnosis right and then advice on both self-management interventions and pharmaceutical treatment.
Comment: Good self-help suggestions.

Palliative Care

28-053 Provision for advanced pain management techniques in adult palliative care: a national survey of anaesthetic pain specialists

Kay S, Husbands E, Antrobus JH, et al. Palliat Med. June 2007. Vol.21. No.4. p.279-84.
Reviewed by Dr Peter Woolford
Review: Advanced pain management techniques include epidural or intrathecal infusions, coeliac plexus blocks etc. To access these services patients generally need to be referred to a specialist pain service. This UK paper found that referral rates from palliative medicine to pain clinics were low and that there was a lack of integration of the two services.
Comment: This is English data but the concept warrants consideration. If we as GPs, with the local palliative care services, are having difficulty controlling pain, then perhaps a nudge to a pain service would be in order. Also, those of us working in a palliative care setting could possibly establish more formal links with the pain service.

28-054 Physician discussions with terminally ill patients: a cross-national comparison

Cartwright C, Onwuteaka-Philipsen BD, Williams G, et al. Palliat Med. June 2007. Vol.21. No.4. p.295-303.
Reviewed by Dr Peter Woolford

Review: What do doctors tell patients' families without informing the patient? This paper is a comparison between Australian, Belgian, Danish, Italian, Dutch, Swedish, and Swiss doctors. All except the Italian doctors 'in principle, always' discuss issues related to the terminal illness with their patients and only with family with the patient's knowledge.

Comment: Interesting social commentary, but I would have liked to have seen a more diverse group of countries covered. Cultural norms vary and for us in New Zealand comparisons with Pacific and Asian countries could be very helpful. Other unpublished data suggest that in NZ there is some sense in newly immigrated Chinese communities that it is not appropriate to burden the patient with cold hard detail, but that this should be handled by the patient's family.

28–055 The challenge of patients' unmet palliative care needs in the final stages of chronic illness

Fitzsimons D, Mullan D, Wilson JS, et al. Palliat Med. June 2007. Vol.21. No.4. p.313-22.
Reviewed by Dr Peter Woolford

Review: End stage care is recognised to be suboptimal for patients suffering terminal heart failure, renal failure or chronic obstructive respiratory disease. Intuitively I think this is because we find it difficult to know when to move from a curative stance or at least a holding pattern to a palliative care mode when the disease trajectory is slow. Generally there is no clear point in time that prompts us to look at our approach to care for a patient and their family, as with a cancer relapse for example. This aside, this paper looks at patients and caregivers' need for a palliative care approach and the usefulness of this earlier in the disease process.

Comment: Recent personal experience with a patient with terminal heart failure has brought this home to me, but still it is a very fine balance between expectation of improvement and palliation, particularly in terms of timing. But I guess this is the art of general practice and the privilege of having long-term relationships with our patients.

28–056 Palliative care in stroke: a critical review of the literature

Stevens, T, Payne SA, Burton C, et al. Palliat Med. June 2007. Vol.21. No.4. p.323-31.
Reviewed by Dr Peter Woolford

Review: Providing appropriate palliative care for stroke patients presents challenges. It is often difficult to predict those who may die in the acute phase (the first month following a stroke) and those whose death occurs at a later stage, and thereby being able to provide the appropriate care. We will always try to focus on rehabilitation rather than palliation but a certain number of stroke patients will always require palliation. This paper reviews the current rather sparse data on palliative care in the stroke situation.

Comment: A good paper for those involved in the ongoing care of people, in the community or in residential facilities, who have suffered strokes, but it also reminds all of us of the breadth of need for palliative care, and as a reminder that palliative care is not just cancer care.

28–057 A panacea of general practice

Dabscheck A. Palliat Support Care. June 2007. Vol.5. No.2. p.177-8.
Reviewed by Dr Peter Woolford

Review: Adrian Dabscheck from a cancer centre in Melbourne writes that *'as a GP...one of my roles is to protect my patients from those peddling a panacea who in the process may impose burdensome costs, be they physical, psychological or financial.'*

Comment: Read this paper. I am always a sucker for the historical context of modern medicine and this paper explores the modern concept of a panacea relating back to the Greek mythologies. It is very relevant to consider the concept of panacea as it is not uncommon for all and various to be promoting a panacea for our palliative patients.

Preventive Medicine and Screening

28–058 Coronary artery disease screening, treatment, and follow-up

Junnila, JL Runkle GP. Prim Care. December 2006. Vol.33. No.4. p.863-5.
Reviewed by Dr Michael Hewitt

Review: The approach considered involves risk assessment before disease onset. Avoid wasting 'resources' on low-risk screening and focus on medium to high risk populations. Once 'discovered', then risk factor management with all the modern tools available becomes clinically stratified.

Comment: A computer resource based on Internet access for New Zealand is PREDICT.

28–059 Factors associated with decline in physical functional health in a cohort of older women

Sibbritt DW, Byles JE, Regan C. Age Ageing. July 2007. Vol.36. No.4. p.382-8.
Reviewed by Fiona Corbin

Review: The authors analyse survey data obtained in the Australian Longitudinal Study on Women's Health to identify variables that may be useful in clinical screening to predict decline in physical health-related quality of life in older women. Application of statistical methods identified three items which accurately predicted 76% of the women who would exhibit physical decline according to the study definitions. An individual's self-rated level of satisfaction with their physical ability, problems with feet, and taking five or more medications were the strongest predictors of subsequent decline according to the study defined model.

Comment: This is a fairly interesting paper. I personally found the sta-

tistical methods overwhelming and therefore feel unqualified to comment on the technical validity of the results although they seem intuitively reasonable.

28-060 Screening: new guidance on what and what not to do

Campos-Outcalt D. J Fam Pract. June 2007. Vol.56. No.6. p.461-4.
Reviewed by Dr Bruce Adlam

Review: The United States Preventive Services Task Force (USPSTF) has published new recommendations for screening: (a) Iron deficiency anaemia in high risk infants, asymptomatic and pregnant women – recommended for; (b) Colon cancer chemoprevention – recommended against; (c) Genetic screening for haemochromatosis – recommended against; (d) Congenital hip dysplasia – recommends against screening??? Unless obvious hip dislocation or other hip abnormality; (e) Elevated lead levels – insufficient evidence; (f) Speech delay – insufficient evidence.
Comment: I found this a rather confusing article with screening recommended for one group but not another. It would be quite difficult to put into practice and requires the clinician to identify high risk groups. This may not be apparent or known at the time. I would stick with NZ policy and guidelines on screening.

Psychiatry

28-061 An evidence-based approach to the management of depression

Maurer D, Colt R. Prim Care. December 2006. Vol.33. No.4. p.923-41.
Reviewed by Dr Michael Hewitt

Review: It is of concern that such a prevalent condition should be treated by OTC and complementary remedies. Aside from the safety of the individuals concerned (both from the condition and the remedies), the authors look at what works best based on evidence-based analysis.
Comment: The summaries and meta-analysis are such that SSRIs, TCA and SNRI are all effective. Thus, initial therapy needs to be selective, keeping in mind all the relevant risk factors and preferences of the patient.

Psychiatry and Psychology

28-062 Increased use of antidepressants at the end of life: population-based study among people aged 65 years and above

Hansen DG, Rosholm J-U, Gichangi A, et al. Age Ageing. July 2007. Vol.36. No.4. p.449-54.
Reviewed by Fiona Corbin

Review: This paper describes an analysis of Danish pharmacy data to determine patterns of antidepressant use among individuals 65 years and older. They found that the one-year prevalence of antidepressant use increases steadily over time in all age groups studied. As death approaches, antidepressant use increases regardless of age, with a third of females and a quarter of males receiving antidepressants in the last six months of life in the population studied.
Comment: A reasonably interesting paper that provides food for thought in terms of the subject itself (i.e. antidepressant use in the elderly), as well as drug utilisation studies in general. Once again, it would be even more interesting if the research had been conducted in the local context.

28-063 Beyond shy: when to suspect social anxiety disorder

Rosenthal J, Jacobs L, Marcus M. J Fam Pract. May 2007. Vol.56. No.5. p.369-74.
Reviewed by Dr Bruce Adlam

Review: Key point from this article is that Cognitive Behavioral Therapy (CBT) is an effective treatment for social anxiety disorder (strength of recommendation = B) and that medication also helps. The article is quite ethnocentric to North America and the screening tool may not be valid for New Zealand cultures. The screening questions are (scoring 1 to 4): Fear of embarrassment causes me to avoid doing things or speaking to people; I avoid activities in which I am the centre of attention; Being embarrassed or looking stupid are among my worst fears. Scores above six are suggestive of social anxiety disorder.
Comment: Would make an interesting research topic.

Public Health

28-064 Time to supersize control efforts for obesity

Editorial. Lancet. 3-9 November 2007. Vol.370. No.9598. p.1521.
Reviewed by Dr Tony Hanne

Review: According to a recent government publication which attracted widespread publicity, obesity in the UK has ballooned over the last few years compared with the rest of the EU. Twenty-three per cent of adults are now obese, but this is predicted to reach to 50% by the year 2050 at the present rate. The biggest rate of increase has been among children. The question is whom to blame, the food industry, the town planners, the entertainment industry or the individual? For those who can only foresee continuing deterioration and the huge cost to health and happiness

there is the remarkable example of Finland which set out 20 years ago to change their obesity and heart disease epidemic. They have dramatically reversed the trend by a whole range of measures which addressed each component of the problem.
Comment: The Finns changed a culture not as most Western governments try to do by dictating behaviour from the centre but by consulting locally and so letting communities be responsible for choosing and carrying out their own changes. NZ take note! (See 28-065 for Comment.)

28-065 Obesity plan lacks foresight

Jack A. Lancet. 3-9 November 2007. Vol.370. No.9598. p.1528-9.
Reviewed by Dr Tony Hanne
Review: See 28-064.

28-066 Effect of city-wide sanitation programme on reduction in rate of childhood diarrhoea in northeast Brazil: assessment by two cohort studies

Barreto M, Genser B, Strina A, et al. Lancet. 10-16 November 2007. Vol.370. No.9599. p.1622-8.
Reviewed by Dr Tony Hanne
Review: Improving the supply of clean water has reduced the incidence of diarrhoeal illnesses, but in developing countries morbidity and mortality from these causes still remains distressingly high. This study looked at the impact on a Brazilian city of a public sanitation system. The level of gastroenteritis was reduced by 27% overall and 43% in the worst affected districts. The answer was not just flush toilets but connecting them to a sewage system which removed the effluent from the local surface water. (see also 28-067, 28-068, 28-069).
Comment: This study seems to have nothing to do with NZ except for a few bach dwellers, but the realisation that 40% of the world's population still lack access to a proper toilet because of ignorance and poverty should disturb our consciences. We accept globalisation when it brings us cheap consumer goods but it should carry with it a moral obligation for targeted aid.

28-067 Progress and inequity in Latin America

Lancet. 10-16 November 2007. Vol.370. No.9599. p.1589.
Reviewed by Dr Tony Hanne
Review: See also 28-066, 28-068 and 28-069.

28-068 Access to toilets for all

Lancet. 10-16 November 2007. Vol.370. No.9599. p.1590.
Reviewed by Dr Tony Hanne
Review: See also 28-066, 28-067 and 28-069.

28-069 A clarion call for greater investment in global sanitation

Durrheim D. Lancet. 10-16 November 2007. Vol.370. No.9599. p.1592-3.
Reviewed by Dr Tony Hanne
Review: see also 28-066, 28-067 and 28-068.

Reproduction

28-070 Clomiphene or metformin for PCOS infertility?

J Fam Pract. May 2007. Vol.56. No.5. p.349.
Reviewed by Dr Bruce Adlam
Review: Clomiphene was more effective than metformin for enhancing fertility for women with polycystic ovary syndrome (PCOS). This study did not find that the combination of clomiphene and metformin was more effective than clomiphene alone. (Level of evidence 1b.) This study involved 626 women. The live birth rate was 22.5% in the clomiphene group, 7.2% in the metformin group, and 26.8% in the group receiving combination therapy. The difference between clomiphene and metformin and between combination therapy and metformin were significant, but the difference between clomiphene and combination therapy was not. (Original article reviewed: N Engl J Med 2007; 56: 551-566.)
Comment: Adverse events were rare.

28-071 What hormonal contraception is most effective for obese women?

Gordon L, Thakur N, Atlas M. J Fam Pract. June 2007. Vol.56. No.6. p.471-3.
Reviewed by Dr Bruce Adlam
Review: Depot medroxyprogesterone acetate (DMPA; Depo-Provera) and the combination contraceptive vaginal ring (NuvaRing) are most effective for obese women because they don't appear to be affected by body weight (strength of recommendation [SOR]: = B, consistent cohort studies). On the other hand, women using the combination contraceptive patch (Ortho Evra) who weigh 90kg or greater may experience decreased contraceptive efficacy (SOR = A, meta-analysis). Obese women using oral contraceptives may also have an increased risk of pregnancy (SOR = B, inconsistent cohort studies). Data are not available on the levonorgestrel intrauterine system's (Mirena) efficacy in obese women.
Comment: NuvaRing and OrthoEvra are not available in NZ

Rheumatic Diseases

28-072 Adverse reactions and safety of newer disease-modifying antirheumatic drugs (DMARDs) for rehumatoid arthritis

Khan S, Justice E, Jobanputra P. Adverse Drug React Bull. February 2007. No.242. p.927-30.
Reviewed by Damien Hannah
Review: This is an update of a 2004 review. Although the authors claim it is not an exhaustive review, it covers more agents than are available in New Zealand. Drugs are considered by their mode of action. A section on the tumour necrosis factor inhibitors infliximab, etanercept and adalimumab is included. Leflunomide and rituximab are also featured.
Comment: A fairly solid read. Considering these drugs are not widely used this review may have limited appeal. It may be a useful watch list for GPs with patients taking these agents and it may also be useful for

putting the risks in context for concerned patients.

Rheumatology

28–073 A guide to managing knee pain in older adults

J Fam Pract. June 2007. Vol.56. No.6. p.433.
Reviewed by Dr Bruce Adlam
Review: A team from the Primary Care Rheumatology Society recently developed a guideline that suggests a multistepped approach (detailed below) to managing patients who are 50 years of age or older and have knee pain due to degenerative joint disease. However, this guideline, like others that have come before it, suffers from not having been tested for real-world feasibility or effectiveness. There are some inconsistencies in that weight loss and paracetamol are in Step 1 but NSAID gels are reserved for Step 3 with intra-articular injection. (Original article reviewed: Rheumatology 2007; 46: 638048.)
Comment: The various options are useful but you may want to reorder some of the steps. Step 1: Weight loss, Acetaminophen (paracetamol), exercise, written patient information, restorative sleep advice, thermotherapy, symptomatic slow-acting drugs (e.g. glucosamine, chondroitin, diacerein, avocado-soybean unsaponifiables). Step 2: Nonselective NSAIDs, compound opioid analgesics, physiotherapy, wedged insoles, selective NSAIDs, group education sessions, capsaicin, acupuncture, appliances, Walking aids. Step 3: Intra-articular hyaluronan, intra-articular corticosteroids, occupational therapy, transcutaneous electrical nerve stimulation (TENS), topical NSAIDs, cognitive behavioural therapy. Step 4: Surgical referral.

Screening

28–074 Maternal psychological reaction to newborn genetic screening for type 1 diabetes

Kerruish NJ, Campbell-Stokes PL, Gray A, et al. Pediatrics. August 2007. Vol.120. No.2. p.e324-e35.
Reviewed by Dr Jocelyn Tracey
Review: The neonates of two groups had neonatal screening for genetic susceptibility to type 1 diabetes; those at increased genetic risk and those at low risk. Both groups and a control group were followed up over the first year of life. There is no difference in scores on the Vulnerable Baby Scale and Edinburgh Postnatal Depression Scale for anxiety measures.
Comment: Testing in itself need not have adverse psychological effects. The discussion section is a good summary of the issues around genetic testing.

Sports and Exercise Medicine

28–075 Tour de chaos

Lippi G, Franchini M, Guidi GC. Br J Sports Med. 1 October 2007. Vol.41. No.10. p.625-6.
Reviewed by Dr Chris Milne
Review: The 2006 Tour de France is examined in detail, concentrating on the sequence of events that ultimately lead to Floyd Landis being stripped of the winner's title after analysis of his urine revealed an elevated ratio of testosterone to epitestosterone (T/E ratio).
Comment: This whole saga has raised many important questions, and the authors suggest that doping in sport should be addressed by prevention rather than prosecution. In my view, sanctions for those who violate antidoping codes are still a necessary part of the mix.

28–076 Reference intervals for serum creatine kinase in athletes

Mougios V. Br J Sports Med. 1 October 2007. Vol.41. No.10. p.674-8.
Reviewed by Dr Chris Milne
Review: CK is a muscle enzyme, and many reports have shown higher levels in athletes than non-athletes. This study of 483 males and 245 female athletes established reference ranges of 82-1083 U/L in male athletes, and 47-513 U/L in female athletes.
Comment: CK levels tend to be highest after unaccustomed exercise (e.g. at the start of an intensive training programme, particularly if this involves eccentric exercise). These reference ranges are in accord with my clinical experience over the past 20 years.

Technology

28–077 Using a computer kiosk to promote child safety: results of a randomized, controlled trial in an urban pediatric emergency department

Gielen AC, McKenzie LB, McDonald EM, et al. Pediatrics. August 2007. Vol.120. No.2. p.330-9.
Reviewed by Dr Jocelyn Tracey
Review: This study investigated the effectiveness of an interactive computer kiosk intervention on parents' safety seat, smoke alarm and poison storage knowledge and behaviours. The computer provided a personalised report with safety messages tailored to the parent's responses. The control group computer intervention covered different topics. Follow-up of 759 parents at two to four weeks showed significantly higher knowledge of child safety and higher reported correct car seat usage. The kiosk was located in the emergency department.
Comment: Interactive educational computer programmes with personalised reports can change patient behaviours.

28–078 Big lab on a tiny chip

Choi CQ. Sci Am. October 2007. Vol.297. No.4. p.74-7.
Reviewed by Dr Ron Vautier
Review: This article reviews some of the progress that has made towards miniaturising chemical laboratory testing on to silicon chips. With small size comes cheapness, and it looks likely that eventually consumers will have these available at home for self-diagnosis of numerous common illnesses.
Comment: Should appeal particularly to those who are fascinated by the details of technology.

Wound Management

28–079 The clinical effect of topical phenytoin on wound healing: a systematic review

Shaw J, Hughes CM, Lagan KM, et al. Br J Dermatol. November 2007. Vol.157. No.5. p.997–1004.

Reviewed by Dr Shane Reti

Review: A systematic review of the literature returned 14 RCTs suggesting some benefit to topical phenytoin in diabetic foot ulcers, leg ulcers and chronic wounds, but nil in burns and war wounds. No description given as to the formulation of topical phenytoin, and one can only speculate on the mechanism of action, although it has known growth type properties when one thinks of the buccal hyperplasia that oral phenytoin gives as a side effect.

Comment: Interesting to see more studies on this.

28–080 Topical negative pressure for chronic wounds?

Drug Ther Bull. August 2007. Vol.45. No.8. p.57–61.

Reviewed by Fiona Corbin

Review: This paper describes topical negative pressure – an alternative method for acute and chronic wound healing. Topical negative pressure is also known as sub-atmospheric pressure, sealed surface wound suction, vacuum sealing technique, or foam suction dressing. The paper includes a description of the mechanistic theory underlying topical negative pressure and a review of the published randomised controlled trials of efficacy for healing venous leg ulcers, diabetic foot ulcers and pressure ulcers. There is also a comprehensive and useful section considering the various methodological problems inherent in comparative studies of wound healing modalities. Despite the available evidence the clinical effectiveness and comparative cost effectiveness of this therapy remains unclear.

Comment: As is usual for articles appearing in *Drug and Therapeutics Bulletins*, this is a concise yet comprehensive and very readable overview of the topic.

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Advertising enquiries:
Colin Gestro ph: 09–489 8911, fax: 09–489 8941, email: colingestro@affinityads.com

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Cherylyn Borlase, Publications Coordinator
Royal New Zealand College of General Practitioners
P O Box 10-440, WELLINGTON
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