



Continuing Medical Education
in General Practice
from the Goodfellow Unit

About JRS

Copies of articles reviewed in the Journal Review Service (JRS) may be ordered by completing the yellow, free postage mailing slip found in this journal. Please quote the review numbers (e.g. 21-095) for the articles you order. If the mailing slip has been used then please send a letter to the address below. We do require a return postal address. The JRS is a guide to current reading in General Practice. Each article reviewed in the JRS has been selected by the reviewer because, in some aspect, it is considered worth reading by general practitioners. The majority of reviewers are themselves general practitioners. A review in the JRS should not be considered a substitute for reading the original article. The JRS seeks to extend the range of journals reviewed and always welcomes new reviewers. The Goodfellow Unit, Faculty of Medicine and Health Sciences, The University of Auckland, would especially like to thank the reviewers and their staff for the time they generously give to the JRS. We would also like to thank the Philson Library (who supply the reprint service), the RNZCGP, and the other sponsors of the JRS.

JRS Reviewers Required

Please contact: Dennis Kerins, Goodfellow Unit
Faculty of Medical & Health Sciences
University Private Bag 92019
Auckland, New Zealand



Journal Review Service

*Continuing Medical Education
in General Practice from the Goodfellow Unit*

Journals Reviewed in this Issue

Acupunct Med*
Adverse Drug React Bull*
Age Ageing*
Am J Obstet Gynecol*
Aust Fam Physician*
BMJ*
Br J Sports Med*
Can Fam Physician*
Drug Ther Bull*
J Altern Complement Med*
J Fam Pract*
Lancet*
Prim Care*
Sci Am*
*Journals indexed in Medline

Acupuncture

28-244 Auricular acupuncture versus sham acupuncture in the treatment of women who have insomnia

Sjoling M, Rolleri M, Englund E. J Altern Complement Med. January 2008. Vol.14. No.1. p.39-46.

Reviewed by Dr Alex Chan

Review: This small-scale study did not find any statistically significant difference between real and sham ear acupuncture in the treatment of insomniac women with respect to sleep onset latency, total sleep time, sleep efficacy, and sleep quality. However, the participants slept on average an hour more, as well as having significant improvement in sleep quality towards the end of the treatment period. The ear acupuncture points used were Shenmen, Sympathetic Autonomic, Kidney, and Insomnia 1 & 2 while the control points were on the Helix between landmark 2 and 3.

Comment: An interesting study with a quality discussion on the findings – did

it really matter where the needles were inserted, or were there confounding factors during the procedure, or was the outcome measure not objective enough? Enjoy the mental challenge!

28-245 Acupuncture for pelvic and back pain in pregnancy: a systematic review

Ee CC, Manheimer E, Pirootta MV, et al. Am J Obstet Gynecol. March 2008. Vol.198. No.3. p.254-9.

Reviewed by Dr Alex Chan

Review: Combination of acupuncture and standard treatment appeared to be more effective than standard treatment alone, physiotherapy, or stabilising exercises plus standard treatment in relieving pelvic and lower back pain during pregnancy according to this review.

Comment: Only three studies of accepted quality were analysed. Obviously, stronger evidence is required. Two other ongoing trials were identified during this review. So, watch this space. It is also interesting to note that in one of the trials (Kvorning et al. 2004) the acupuncture needles were withdrawn after de qi was obtained and the pain relief was still significantly better than the control group. Is it essential to retain needles for 20-30 minutes as generally taught and practised?

28-246 Trigger point acupuncture for treatment of knee osteoarthritis – a preliminary RCT for a pragmatic trial

Itoh K, Hirota S, Katsumi Y, et al. Acupunct Med. 2008. Vol.26. No.1. p.17-26.

Reviewed by Dr Alex Chan

Review: This is a randomised controlled trial comparing the effect of trigger points needling and traditional acupuncture for osteoarthritis of the

knee. All patients were blindfolded and control was performed by sham needling using blunted non-perforating needles. Both trigger points needling and traditional acupuncture were found to be more effective than sham acupuncture. The results also suggested trigger points needling might be more effective than traditional acupuncture.

Comment: This is a small study. Trigger points used included points in the lumbar region as well as those on the thigh, while in the traditional acupuncture arm only ST-34, ST-35, ST-36, SP-9, SP-10 and GB-34, were used. All these are relatively local points only. The results could be different if the traditional acupuncture points included BL-23 which could be justified as a point for strengthening kidneys and bones. In practice, a lot of acupuncturists find it much more effective needling paraspinal reactive points in addition to local points for treatment of various ailments.

28-247 Acupuncture for irritable bowel syndrome – an exploratory randomised controlled trial

Reynolds JA, Bland JM, MacPherson H. *Acupunct Med.* 2008. Vol.26. No.1. p.8-16. Reviewed by Dr Alex Chan

Review: This is a pilot study to provide information for a future larger scale study on the effects of acupuncture and GP care on irritable bowel syndrome versus GP care alone. The design was one of randomised trial without blinding. The acupuncture protocol was flexible but allowed sufficient standardisation to assist replication. Several outcome measures were used: IBS Symptom Severity Score (SSS), Global Impact Score,

Non-Colonic Symptom Score, Hospital Anxiety and Depression Scale, EQ-5D, medication use, other health services used and days off work. Addition of acupuncture was found to have significantly positive effects on the IBS SSS and Global Impact scores, indicating the need for a large scale study. Data obtained also allowed the investigators to calculate the sample size, and to refine procedures and processes for the future study.

Comment: This paper demonstrated a sense of seriousness in improving the quality of clinical research in the field of acupuncture. Limitations and strengths of the pilot study were discussed in details. Well worth reading if one is considering some local studies.

Adolescent Health

28-248 Youth survival: addressing the role or promoting the acquisition of the prosocial triad and other survival skills in youth

Pratt HD, Pratt BM, Sackett M. *Prim Care.* June 2007. Vol.34. No.2. p.219-26. Reviewed by Dr Michael Hewitt

Review: The prosocial triad of altruism, empathy and self-control are seen as the key to contributing to the most positive adult outcomes and the least negative traits for developing youth. The article discusses and defines areas that primary care physicians can promote and develop in these youth deemed to be most at risk

Comment: This is a community problem and requires an 'integrated' community response to achieve the best results.

Alcohol and Substance Abuse

28-249 Adverse reactions to drugs used to treat alcoholism

Theron B, Singhal S. *Adverse Drug React Bull.* December 2007. No.247. p.947-50. Reviewed by Damien Hannah

Review: This article highlights adverse effects associated with medications used in the acute setting (alcohol withdrawal) and those used to reduce ongoing consumption. Risks associated with benzodiazepines, haloperidol and parenteral vitamins are briefly outlined. Drugs used in preventing relapse are considered in more depth. Naltrexone and disulfiram are covered as well as acamprosate and nalmefene – two drugs not available in New Zealand. Benefits and risks of these medications are covered. Problems with patient compliance are also touched on. **Comment:** This is a reminder of how little we have to treat alcoholism. A nice evidence-based summary of the risks and benefits of naltrexone and disulfiram.

Alcohol Drinking

28-250 Impacts of alcohol use in pregnancy – the role of the GP

Peadon E, O'Leary C, Bower C, et al. *Aust Fam Physician.* November 2007. Vol.36. No.11. p.935-9. Reviewed by Dr Mary Tucker

Review: This article discusses the clinical features of fetal alcohol spectrum disorders (FASD) and the role of the general practitioner in prevention and management. Alcohol use in pregnancy may cause birth defects, growth failure, developmental delay and learn-

PROUDLY SPONSORED BY:



The Royal New Zealand
College of General Practitioners

ing difficulties. Early diagnosis and intervention for these problems may reduce adverse long-term outcomes. Health professionals should provide information to women about the potential risks to the fetus from alcohol consumption during pregnancy.

Comment: General practitioners have an important role in identifying women and children at risk of harm from alcohol and arranging referral for assessment and management when necessary.

Cardiovascular System

28-251 Cardiovascular risk assessment in family practice – a practice-based tool

Kennie N, Watson B, Iglar K. Can Fam Physician. January 2008. Vol.54. p.34-5.

Reviewed by Dr Mike Lyons

Review: Short article with attached two page separate assessment and tracking sheets for men and women on a small scale quality assurance study of the use of the tool.

Comment: Basic paper-based assessment to calculate 10 year CVD risk in male at 40 years and females at 50 years. Targets for LDL and TC/HDL ratio differ from our guidelines. Clinical definition of metabolic syndrome differs from New Zealand criteria – and the goal posts are shifting here. Convenient tool for doctors without access to Bold Promise cardiovascular risk software.

28-252 When not to use beta-blockers in seniors with hypertension

Schumann S-A, Hickner J. J Fam Pract. January 2008. Vol.57. No.1. p.18-21.

Reviewed by Dr Bruce Adlam

Review: Beta-blockers should not be used to treat hypertension in patients older than age 60 unless they have another compelling indication to use these agents, such as heart failure or ischaemic heart disease. Strength of recommendation=A. Two-thirds of US adults 60 years of age and older have hypertension, mostly isolated systolic hypertension. Multiple studies, including the Systolic Hypertension in

the Elderly Program and the Systolic Hypertension in Europe, have shown that lowering blood pressure with pharmacologic interventions in older patients can reduce the risk of cardiovascular events and possibly dementia. Beta-blockers have been a mainstay of hypertension treatment for many decades and continue to be widely used as first-line therapy in patients for whom the evidence now indicates they are inferior. Patients aged 60 and over are more likely to have an adverse outcome (Composite outcome death, stroke, or MI RR=1.06 (95% CI, 1.01-1.1) and for Stroke alone RR=1.18 (95% CI, 1.07-1.3). (Original articles reviewed: CMAJ 2006; 174:1737-42. (1) Wysong CS, Bradley H, Mayosi BM, et al. Betablockers for hypertension. Cochrane Database Syst Rev 2007; (1):CD0020032)

Comment: This represents a major departure from existing guidelines. Expect to hear more!

Cerebrovascular System

28-253 Reducing the impact of stroke

Litt J. Aust Fam Physician. November 2007. Vol.36. No.11. p.885.

Reviewed by Dr Mary Tucker

Review: Setting the scene for a series of articles related to stroke, its prevention, diagnosis and management. (See 28-254 to 28-259.) Worldwide, 10% of all deaths are related to stroke or its sequelae. In Australia 53 000 people are affected by stroke each year at a cost of \$1.3 billion annually. General practitioners play an important role in implementing primary and secondary prevention measures.

Comment: The editor points to a recent *Lancet* editorial which concluded that *'Implementation of interventions that reduce hypertension, poor diet, and tobacco use will save more lives than all the thrombolytics, antiplatelets, and neuroprotectants combined. There is little doubt that for stroke, prevention really is better than cure.'*

28-254 Management of stroke in general practice

Charles J, Miller G, Fahridin S. Aust Fam Physician. November 2007. Vol.36. No.11. p.890.

Reviewed by Dr Mary Tucker

Review: In general practice, stroke accounted for >2 per 1000 consultation per annum (9 per 1000 in those aged >75 years). Hypertension was managed in one in five stroke related encounters. Antithrombotic agents accounted for 60% of prescribed medicines. Other interventions included counselling, neurology and physiotherapy referrals.

Comment: Summary of reasons for stroke-related consultations in the BEACH programme.

28-255 Time is brain – acute stroke management

Dhamija RK, Donnan GA. Aust Fam

Physician. November 2007. Vol.36. No.11. p.892-5.

Reviewed by Dr Mary Tucker

Review: Stroke is the second leading cause of death in people over the age of 60 years and is the major cause of adult disability. Four specific strategies of proven benefit in acute stroke management are discussed: (1) Aspirin 325mg daily commenced within 48 hours of stroke onset improves outcome. (2) Tissue plasminogen activator (tPA), given intravenously within three hours of the onset of symptoms, produces an improved clinical outcome (number needed to treat to achieve benefit = 18). There is a relative risk reduction of 9.8% for minimal or no disability at three months. Less than 5% of eligible patients are transferred acutely by ambulance to a Stroke Care Unit (SCU) and have a CT scan to exclude haemorrhagic stroke within the three hour time frame in which tPA can be administered. (3) Management in a SCU improves outcome by 20%. (4) Hemicraniectomy in the limited number of patients that develop cerebral oedema improves outcome.

Comment: Stroke is a medical emergency. Urgent transfer, by ambulance, to a SCU for comprehensive care is required. GPs have a vital role in the

education of at risk patients and of the community in stroke recognition and in the importance of urgent admission to a SCU. A link is provided to the National Stroke Foundation FAST test and warning signs of stroke.

28-256 Stroke in children

Mackay MT, Gordon A. Aust Fam Physician. November 2007. Vol.36. No.11. p.896-902.
Reviewed by Dr Mary Tucker

Review: Although stroke in children is rare by adult standards it is among the top 10 causes of death in childhood and is a major cause of disability. Almost 50% of strokes occur in children less than one year of age and 10% of children suffering stroke will die as a result. This article discusses risk factors, investigation, management and outcomes of stroke in children.

Comment: 50-85% of childhood stroke survivors will be left with long-term problems including seizures, motor, behaviour, social, speech or learning difficulties emphasising the need for access to multidisciplinary rehabilitation and ongoing developmental surveillance.

28-257 Acute stroke patients – early hospital management

Dewey HM, Bernhardt J. Aust Fam Physician. November 2007. Vol.36. No.11. p.904-12.
Reviewed by Dr Mary Tucker

Review: Stroke and transient ischaemic attacks are medical emergencies. This article provides an overview of early hospital management, discussing the importance of early diagnosis and treatment within a limited timeframe, close monitoring to prevent the complications of stroke and recurrent strokes, early multidisciplinary rehabilitation and discharge planning and the need to tailor management to the individual patient. The risk of recurrence is highest in the hours and days after the initial event and the importance of the early institution of secondary prevention strategies is emphasised. Stroke Units are cost-effective and help to prevent death and long-term disability in stroke patients.

Comment: Points highlighted include the need to commence Aspirin as soon

as possible (within 48 hours of stroke). While antihypertensive medication will be required by the majority of patients for secondary prevention, blood pressure should not be routinely lowered in the acute setting. Secondary preventions post stroke will usually include antiplatelet medication (aspirin, clopidogrel or aspirin/dipyridamole) and a statin.

28-258 Community care after stroke

Lindley RI. Aust Fam Physician. November 2007. Vol.36. No.11. p.914-7.
Reviewed by Dr Mary Tucker

Review: This article discussed key assessment and secondary prevention strategies for patients in the community post stroke. Rehabilitation can be effective in the community after hospital discharge and can improve function should this deteriorate at a late stage after stroke. While most recovery occurs within the first six months, later recovery can occur and should be facilitated. Stroke survivors should be encouraged to remain physically active: *'Gradual death from underactivity is little feared and much seen.'*

Comment: The importance of regular review of medication and management, of support for family caregivers and of respite care for the severely disabled is discussed.

28-259 Complementary therapies for cerebrovascular disease

Hassed C. Aust Fam Physician. November 2007. Vol.36. No.11. p.921-2.
Reviewed by Dr Mary Tucker

Review: A brief review of complementary therapies used in cerebrovascular disease, including mental practice of a motor skill, which is known to activate the same pathways as physical practice of that skill, electro-acupuncture, garlic and ginkgo biloba.

Comment: As a supplement to conventional rehabilitation, the use of mental practice was shown, in a small (n=32) randomised controlled trial (RCT), to improve rehabilitation outcomes as was electro-acupuncture in another RCT (n=63). There are insuf-

ficient numbers of methodologically sound trials to support the use of garlic or ginkgo biloba.

Child and Adolescent Psychiatry

28-260 Depression in children and adolescent

Calles JL. Prim Care. June 2007. Vol.34. No.2. p.243-58.

Reviewed by Dr Michael Hewitt

Review: The prevalence increases from pre-school children and infants to adolescents. Co-morbidities are common, such as anxiety, attention-deficit, conduct disorder and drug abuse. Recognition is by established clinical findings and history. Effectiveness of various treatment modalities is discussed.

Comment: Medication is rarely recommended for pre-teens.

28-261 Suicide in children and adolescents

Greydanus DE, Calles J. Prim Care. June 2007. Vol.34. No.2. p.259-74.

Reviewed by Dr Michael Hewitt

Review: The prevalence, incidence and recognition of risk factors is discussed. Treatment strategies are analysed with risk management approaches.

Comment: Out of 32 countries listed in Table 1, based on 1996 figures, New Zealand ranks 3rd highest for males and 8th highest for females.

28-262 Screening children for developmental behavioral problems: principles for the practitioner

Miller JW. Prim Care. June 2007. Vol.34. No.2. p.177-201.

Reviewed by Dr Michael Hewitt

Review: The author reviews and gives an evaluation of the current screening tools available for the detection of behavioural problems. The screening inventories are through the initiative of the doctor and not some other governmental agency.

Comment: It seems that the NZ system of Plunket and early childhood education and reading screening from schools along with GP care represents an advance on what is available in the United States.

28-263 Children and autism Part 2 – management with complementary medicines and dietary interventions

Angley M, Semple S, Hewton C, et al. Aust Fam Physician. October 2007. Vol.36.

No.10. p.827-30.

Reviewed by Dr Mary Tucker

Review: Complementary and alternative medicines (CAMs) for autism are often explored as alternatives to mainstream pharmacological agents which provide limited therapeutic options and which may produce adverse side-effects. In this article the rationale, safety and efficacy of a range of CAMs and dietary interventions used in the management of autistic disorders is discussed.

Comment: In spite of anecdotal reports of the efficacy of CAMs, evidence to support their use is not available as large randomised controlled trials have not been conducted and there is a lack of data related to the safety of long-term use. It is possible that there may be subtle benefits to the child, especially if offered with intensive behavioural and/or educational intervention. (For Part 1 see 28-181 in the June 2008 issue of the JRS.)

Dermatology

28-264 How should fungal nail infection be treated?

Drug Ther Bull. January 2008. Vol.46. No.1. p.3-8.

Reviewed by Fiona Corbin

Review: This is a very comprehensive and accessible review of management of fungal nail infections. The paper includes a review of the trial evidence of clinical efficacy of systemic, topical and surgical treatments and combinations thereof. It also contains a summary of British Association of Dermatologists guidelines and provides practical advice on possible approaches to conventional treatment failure.

Comment: This is a pithy and very readable overview of the topic which is typical of Drugs and Therapeutics Bulletin articles.

28-265 Onychomycosis is more than a cosmetic concern

Park MK. J Fam Pract. December 2007.

Vol.56. No.12. p.984.

Reviewed by Dr Bruce Adlam

Review: In the *Clinical Inquiry*, 'Which oral antifungal is best for toenail onychomycosis?' (J Fam Pract 2007; 56:581-2), the authors cite cosmetic concerns and local symptoms as primary reasons to treat. However, having said that, diabetes patients are more prone to toenail onychomycosis and they also stand to suffer the worst outcomes. Acknowledging this potential morbidity should discourage a laissez-faire attitude toward this disease for patients with risk factors for cellulitis.

Comment: This is a summary of a letter regarding the treatment of toenail onychomycosis.

Diabetes

28-266 Tricyclics, capsaicin, and older anticonvulsants are best for neuropathy

J Fam Pract. October 2007. Vol.56. No.10. p.793.

Reviewed by Dr Bruce Adlam

Review: Capsaicin and tricyclic antidepressants produce the best response in patients with short-term painful diabetic neuropathy. If these are ineffective, either valproate or carbamazepine should be the next choice, since both are more effective than the new anticonvulsants such as gabapentin. Opioids also have some evidence of benefit, but not to the same degree as the other choices. Level of evidence 1A. (Original article reviewed: BMJ 2007; 335:87)

28-267 Do glucose monitors help type 2 patients with long-term control?

J Fam Pract. October 2007. Vol.56. No.10. p.801.

Reviewed by Dr Bruce Adlam

Review: For patients with relatively mild type 2 diabetes not requiring insulin, self-monitoring of blood glucose levels had no effect on glycosylated haemoglobin (Hb A1c) levels over the course of the study (12 months), though it increased the like-

lihood of patients experiencing a symptomatic hypoglycaemic episode. Level of evidence 1B. (Original article reviewed: BMJ 2007; 335:132).

Comment: This is quite an interesting study and would be worth discussing in GP CME/peer groups. The study had a 90% power to detect a difference in Hb A1c of 0.5% at the end of the study.

28-268 Metformin does not harm diabetic patients with heart failure

J Fam Pract. December 2007. Vol.56. No.12. p.996.

Reviewed by Dr Bruce Adlam

Review: Metformin may decrease mortality in patients with heart failure. Insulin is associated with increased mortality. The thiazolidinediones decreased mortality but increased hospitalisation for heart failure. (Level of evidence=2a) Metformin – as a single therapy, metformin was associated with decreased all-cause mortality when compared with sulfonylureas (OR=0.70; 95% CI, 0.54-0.91) or insulin (OR=0.86; 95% CI, 0.78-0.97) after 2.5 years of treatment. Combination therapy with metformin and a sulfonylurea was also associated with decreased all-cause mortality. (Original article reviewed: BMJ 2007; 335:497.)

Eye Diseases

28-269 The red eye in contact lens wearers – a high risk presentation

Cronin B, Todd B, Lee G. Aust Fam Physician. October 2007. Vol.36. No.10. p.831-2.

Reviewed by Dr Mary Tucker

Review: This article highlights the importance of diagnosing bacterial keratitis in contact lens wearers presenting with a painful red eye and discusses the urgency of specialist referral. Contact lenses should be removed and kept for culture, fluorescein staining should be performed to identify corneal defects and urgent referral should be made for corneal scraping for culture and institution of appropriate therapy. *Pseudomonas aeruginosa*, the commonest pathogen found on culture, is not sensitive to Chloramphenicol.

Comment: A sight-threatening condition: a painful red eye in a contact lens wearer should be considered to be bacterial keratitis unless proven otherwise.

Gastroenterology

28-270 How to catch more cases of celiac disease

J Fam Pract. October 2007. Vol.56. No.10. p.786.

Reviewed by Dr Bruce Adlam

Review: This study tells us that coeliac disease is relatively common in primary care practice, particularly in patients with gastrointestinal symptoms, chronic diarrhoea, or thyroid disease. They suggest patients should be evaluated for coeliac disease using the strategy described in this study. They were successful in a diagnosis in 11.6/1000 patients, as confirmed by intestinal biopsy or a successful trial of a gluten-free diet. (Original article reviewed: Am J Gastroenterol 2007; 102:1454-1460)

Comment: This was a resource intensive method of finding coeliac diseases in the primary care population, however, the key presenting symptoms for those diagnosed was of interest: bloating (12/22 patients), thyroid disease (11/22), irritable bowel (7/22), and chronic diarrhoea (6/22).

28-271 Course is benign for uncomplicated diverticular disease

J Fam Pract. December 2007. Vol.56. No.12. p.992.

Reviewed by Dr Bruce Adlam

Review: In this small study of 163 adults, 64 to 80 years old, in an outpatient setting, to evaluate the natural history of diverticular disease, these investigators found the vast majority (more than 95%) of adults diagnosed with symptomatic uncomplicated diverticular disease described their symptoms as 'none' or 'mild', and as not affecting their daily activities, after a five-year follow-up. (Original article reviewed: Dis Colon Rectum 2007; 50:1460-4.)

28-272 What is the risk of bowel strangulation in an adult with an untreated inguinal hernia?

Leubner KD, Chop WM. J Fam Pract. December 2007. Vol.56. No.12. p.1039-41.

Reviewed by Dr Bruce Adlam

Review: The risk of bowel strangulation is estimated to be small – less than 1% per year (strength of recommendation = B). Experts recommend repair for patients with risk factors for poor outcomes after potential strangulation. These risk factors include advanced age, limited access to emergency care, significant concomitant illness, inability to recognise symptoms of bowel incarceration, and poor operative risk. It is reasonable to offer elective surgery or watchful waiting to low-risk patients who understand the risks of strangulation SOR=C.

General

28-273 The art of medicine – Thomas Wakley, plagiarism, libel, and the founding of *The Lancet*

Jones R. Lancet. 26 April – 2 May 2008. Vol.371. No.9622. p.1410-1.

Reviewed by Dr Tony Hanne

Review: *The Lancet* was not founded by a boring academic but a fiery radical reformer. Thomas Wakley had much to do with transforming medicine and surgery from a crude, money-making, secret society into an honourable, evidence-based profession which aspired to the highest standards. When he began the *Lancet* in 1823 at the age of 28 he immediately became involved in one high profile controversy after another. His greatest contributions were in demanding openness about disseminating medical knowledge and exposing gross medical error. He was largely responsible for the UK Medical Act of 1858 which made medical education and registration essential for practising doctors.

Comment: We still need doctor-journalists like Wakley. This is a refreshing and challenging article which is absolutely relevant in New Zealand today.

Genetics

28-274 Past, present and future

O'Shea C. Aust Fam Physician. October 2007. Vol.36. No.10. p.789.

Reviewed by Dr Mary Tucker

Review: This issue of the *Australian Family Physician* focuses on the rapidly expanding field of genetic medicine and explores issues related to general practice.

Comment: Topics covered include population screening for genetic disorders, the importance of a family history in providing clues to genetic issues and the impact of increasing knowledge on clinical practice in the areas of prevention and therapy, including genetically guided prescribing. (See 28-275 to 28-280.)

28-275 Management of haemochromatosis in general practice

Charles J, Miller G, Harrison C. Aust Fam Physician. October 2007. Vol.36. No.10. p.792.

Reviewed by Dr Mary Tucker

Review: Statistics from the BEACH programme show that one in 1000 consultations in general practice relate to Haemochromatosis – 60% of these in male patients. Fifty per cent of patients with haemochromatosis were aged 45–64 years and were twice as likely to consult a GP compared with others of the same age.

Comment: Commonly, consultations were for test results, venesection and blood tests, problems managed included musculoskeletal problems or hypertension, and management included prescription of NSAIDs or analgesics and the provision of advice, education or counselling.

28-276 Population genetic screening

Metcalfe SA, Barlow-Stewart K, Delatycki MB, et al. Aust Fam Physician. October 2007. Vol.36. No.10. p.794-800.

Reviewed by Dr Mary Tucker

Review: A practical and useful summary of the general practitioner's role in identifying relevant issues in past history and family history, providing pre-conception and prenatal counselling, prenatal screening and newborn screening. Carrier screening for autosomal recessive conditions in susceptible population groups (e.g. in the Jewish community for Tay Sachs's dis-

ease) and the potential for screening, in the future, for genetic markers associated with susceptibility to common complex conditions as well as screening that harnesses developments in pharmacogenomics is discussed.

Comment: Prenatal screening should be offered to all pregnant women as a choice. The importance of education and counselling related to genetic testing and screening programmes is emphasised.

28-277 Family genetics

Barlow-Stewart K, Gaff C, Emery J, et al. Aust Fam Physician. October 2007. Vol.36. No.10. p.802-5.

Reviewed by Dr Mary Tucker

Review: The importance of a comprehensive family history in the prediction and diagnosis of inherited conditions is emphasised. Ancestry and cultural background can aid in diagnosis, risk prediction, referral and need for genetic testing. Examples of genetically inherited conditions occurring in various ethnic and cultural groups and the estimated frequency of occurrence in these groups are quoted as a guide to appropriate screening for these conditions. Genetic services offer counselling, genetic testing and support for decision making and its consequences. Support groups for specific conditions offer a valuable service to affected families.

Comment: Information sheets related to a number of Genetic disorders and a Family Health History Record are available for download from the Centre for Genetics Education, NSW Health (online resources linked to the article).

28-278 Genetics and preventive health care

Emery J, Barlow-Stewart K, Metcalfe SA, et al. Aust Fam Physician. October 2007. Vol.36. No.10. p.808-11.

Reviewed by Dr Mary Tucker

Review: Familial hypercholesterolaemia accounts for five to 10% of CHD in patients under 55 years of age and is inherited in an autosomal dominant fashion. In Australia one in 500 carry one of the affected genes, 20% of those with this condition are diagnosed and

less than 10% are adequately treated. In those of Christian Lebanese, Afrikaner or French Canadian ancestry the genetic mutation is more common. The importance of obtaining a family history is emphasised, clinical features are described and management of cardiovascular risk factors from an early age is discussed. Genetic testing is used to confirm the diagnosis in those with a high prevalence ancestry. Hereditary haemochromatosis is commonest in those of Northern European ancestry and is inherited as an autosomal recessive and therefore there may be no family history. Diagnosis is based on the combination of a raised ferritin and fasting transferrin saturation >45%. If HFE gene testing shows the patient to be a C282Y homozygote and iron overload is present lifelong venesection is required. Life expectancy is normal if the condition is diagnosed and treatment commenced before hepatic cirrhosis develops. First degree relatives should be offered genetic testing.

Comment: These conditions highlight the potential for genetic medicine to be applied to support tailored disease prevention in general practice.

28-279 Genetics and blood: Haemoglobinopathies and clotting disorders

Metcalfe SA, Barlow-Stewart K, Campbell J, et al. Aust Fam Physician. October 2007. Vol.36. No.10. p.812-9.

Reviewed by Dr Mary Tucker

Review: This article describes the aetiology and clinical course of the haemoglobinopathies (Thalassaemias α , β and sickle cell disease) and thrombophilias (genetic mutations resulting in a deficiency in anticoagulant factor, excess in procoagulant factor or abnormal fibrinolysis). Ethnic groups at high risk are identified, the frequency of the carrier state in these populations is noted and the importance of obtaining a family history is emphasised. Testing for the carrier state of haemoglobinopathies should be performed pre-conception in individuals and their partners who belong to at risk groups (FBC, Iron studies and Hb electrophoresis). Indications for

referral for DNA testing are discussed. Screening for thrombophilia is recommended in patients with DVT at <50 years of age, spontaneous thrombosis in the absence of other risk factors, recurrent thrombosis, family history of thrombosis or thrombosis in unusual sites. Acquired risk factors that increase the risk of venous thromboembolism are detailed and indications for thromboprophylaxis are discussed. Combined oral contraceptives are relatively contraindicated in women with hereditary thrombophilia and the importance of obtaining a past and family history with regard to venous thromboembolism and consideration of alternative methods of contraception is emphasised.

Comment: Ethnic groups with a high incidence of haemoglobinopathies are encountered with increasing frequency in the Australian population. General practitioners play an important role in recognising and identifying those at increased risk of these anaemias and also in identifying those at increased risk of clotting disorders.

28-280 Pharmacogenomics – the potential of genetically guided prescribing

Singh A, Emery J. Aust Fam Physician. October 2007. Vol.36. No.10. p.820-4.

Reviewed by Dr Mary Tucker

Review: The emerging field of Pharmacogenomics explores the prediction of medication response from a knowledge of genetic factors. We differ in only one base pair per 1000 genes (single nucleotide polymorphisms or SNPs) but this 0.1% genetic variation (equivalent to three million SNPs) holds the key to differing responses to drugs. Certain SNPs are associated with different pharmacokinetic and pharmacodynamic responses to many commonly prescribed drugs. Using micro-array technology it may be possible to genotype patients rapidly and cost effectively and to predict, from the polymorphism profile of key enzymes and transporter systems involved in drug metabolism, an effective and tolerable dose of a drug for an individual. Pos-

sible applications of this new knowledge are discussed and are illustrated citing genomic profiling for common variants in the cytochrome P450 enzymes and transport systems involving serotonin, noradrenaline and the blood brain barrier in antidepressant prescribing and for variants of CYP2C9 and vitamin K epoxide reductase in the prescription of warfarin.

Comment: Large clinical trials to determine the clinical usefulness and cost-effectiveness of genetic profiling to guide prescribing are required before Pharmacogenomics can be considered in routine clinical practice.

Geriatrics

28-281 If you don't ask (about memory), they probably won't tell: if elders do self-report memory problems, their quality of life is probably suffering

Waldorff FB, Rishoj S, Waldemar G. *J Fam Pract.* January 2008. Vol.57. No.1. p.41-4.

Reviewed by Dr Bruce Adlam

Review: This was a cross-sectional study to investigate the prevalence and potential clinical implications of self-reported memory impairment among elderly patients in 17 general practices serving 2934 patients who were 65 years of age or older. Outcome measures were self-reported memory impairment, health-related quality of life, and cognition. In total, 177 (23.4%) out of 758 elderly patients consulting their physician reported impaired memory. Only 33 (18.6%) had consulted their physician for memory problems. The only independent predictor for impaired memory was a lower quality-of-life score: scores on the EuroQoL-5D-VAS of 0 to 49 and 50–74 points both correlated with memory complaints (odds ratios=4.8 and 4.1, respectively).

Comment: The authors recommend GPs ask elderly patients whether they're having any memory problems, since they are unlikely to volunteer this information on their own. Doing so may help to identify potentially frail patients (Strength of recommendation (SOR=C)).

Gynaecology

28-282 Azithromycin for PID beats doxycycline on all counts

Rowland K, Ewigman B. *J Fam Pract.*

December 2007. Vol.56. No.12. p.1006-9.

Reviewed by Dr Bruce Adlam

Review: Outpatient treatment of 133 patients with mild pelvic inflammatory disease, using 1g of azithromycin weekly for two weeks, combined with 250mg of ceftriaxone intramuscularly on the first day, is superior to the current recommended treatment with doxycycline plus ceftriaxone. Azithromycin cure rate 90%, doxycycline 72%. Better adherence is the probable bonus with the authors speculating that taking two pills one week apart is much easier for patients than taking two pills every day for 14 days. (Original article reviewed: *Obstet Gynecol* 2007; 110:53-60.)

Comment: Nice study and interesting style of writing up. Clear simple and relevant.

28-283 Treatment of vasomotor symptoms: options for clinicians and their patients

J Fam Pract. January 2008. Vol.57. No.1. p.57-15.

Reviewed by Dr Bruce Adlam

Review: This is a very good review covering a variety of interventions that are available to clinicians for treatment of vasomotor symptoms associated with the menopause. These range from lifestyle modification, to pharmaceutical agents (oral or transdermal), to over-the-counter alternative medicine products. In a related article the authors review the results of the Women's Health Initiative (WHI) and other recent trials to assess the risk/benefit ratio of hormone therapy (HT). (See 28-284)

28-284 Risks/benefits of HT: putting the WHI into perspective

J Fam Pract. January 2008. Vol.57. No.1. p.S10-1.

Reviewed by Dr Bruce Adlam

Review: See 28-283.

Men's Health

28-285 The top 13 – what family physicians should know about prostate cancer

Katz A, Katz A. *Can Fam Physician.* January 2008. Vol.54. p.198-203.

Reviewed by Dr Mike Lyons

Review: Highlights 13 important aspects to address in advising patients on prostate cancer treatment options, side-effects and ongoing monitoring. Considers three facets – treatment decision making, after radical prostatectomy and after radiation therapy. Does not deal with the controversy of screening.

Comment: Helpful pointers – especially re being honest re risks of incontinence and impotence. The fact that pointer two – involve the partner – needs highlighting implies that it is not always addressed.

Microbiology

28-286 How cells clean house

Deretic V, Klionsky DJ. *Sci Am.* May 2008. Vol.298. No.5. p.52-9.

Reviewed by Dr Ron Vautier

Review: Within the cytoplasm of cells there is an ongoing process by which organelles called autophagosomes surround damaged parts and invading bacteria and viruses. These then fuse with lysosomes, leading to enzymatic digestion and recycling, particularly of amino acids, or, by fusing with endosomes stimulate various parts of the immune response. If a cell is too badly damaged autophagy may go on to complete its total demise. Alternatively where some event has happened which might lead the cell down the path of apoptosis, as for example a badly damaged mitochondrion, autophagy can remove the damaged part and rescue the cell. Researchers are elucidating the protein signals that start and control the process.

Comment: A fuller understanding of autophagy is opening up new options for treating cancer, infectious diseases, immune disorders and dementia. While there appears to be no immediate practical application of the ma-

terial in this article, its consideration should reward all who wish to understand more of the basic biology underlying medical practice. It is clearly presented and very well illustrated.

Musculoskeletal System

28-287 Physical examination tests of the shoulder: a systematic review with meta-analysis of individual tests

Hegedus EJ, Goode A, Campbell S, et al. *Br J Sports Med.* February 2008. Vol.42. No.2. p.80-92.

Reviewed by Dr Chris Milne

Review: This review analysed 45 studies and pooled their results for impingement, the Neer test demonstrated 79% sensitivity and 53% specificity. The Hawkins-Kennedy test (my favourite) had 79% sensitivity and 59% specificity for superior labral tears (SLAP lesions). Speed's test had a sensitivity of 32% and a specificity of 61%. Seventy-six references.

Comment: Reading this article, you may come away disappointed. However, to my mind these figures are actually quite encouraging, because it needs to be appreciated that the clinical examination is usually performed after a good history has been taken.

28-288 Association between foot type and tibial stress injuries: a systematic review

Barnes A, Wheat J, Milner C. *Br J Sports Med.* February 2008. Vol.42. No.2. p.93-98.

Reviewed by Dr Chris Milne

Review: Four hundred and seventy-nine articles were identified, and only nine were deemed adequate for inclusion in this review. In summary – extremes of foot type (high arched or flat feet) are likely to pose an increased risk of tibial stress injuries compared to normal arched feet.

Comment: This is what you would expect, from first principles. Nevertheless, it is good to have one's 'gut feeling' backed up by some evidence.

28-289 Open versus closed kinetic chain exercises for patellar chondromalacia

Bakhtiary AH, Fatemi E. *Br J Sports Med.* February 2008. Vol.42. No.2. p.99-102.

Reviewed by Dr Chris Milne

Review: Patella chondromalacia is called patellofemoral knee pain by most clinicians in New Zealand (Chondromalacia is a pathological term). Closed chain exercises (semi squat) were found to be more effective than open chain (straight leg raise exercise) in this study of 32 female university students.

Comment: Since Patellofemoral pain is the commonest knee problem in primary care, this is important information. One would postulate that the reason that closed kinetic chain exercises are more effective is that they involve hamstring activation, and the hamstring muscles are important in stabilising the knee.

28-290 Are steroid injections effective for tenosynovitis of the hand?

Graham JB, Hulkower SD, Bosworth M, et al. *J Fam Pract.* December 2007. Vol.56.

No.12. p.1045-7.

Reviewed by Dr Bruce Adlam

Review: Yes. Steroid injections are an effective first-line therapy for flexor tenosynovitis of the hand, with a number needed to treat [NNT] of 2.3 for injection of steroids and lignocaine (strength of recommendation =B). Injection into the tendon sheath may not be critical to a successful outcome. For de Quervain's tenosynovitis, the cure rates are 83% (steroid alone), 61% (steroid plus splinting), and 14% (splinting alone) (SOR: B, based on a systematic review of descriptive noncontrolled studies).

Nephrology

28-291 Using the modification of diet in renal disease (MDRD) and Cockcroft and Gault equations to estimate glomerular filtration rate (GFR) in older people

Lamb EJ, Webb MC, O'Riordan SE. *Ageing.* November 2007. Vol.36. No.6. p.689-92.

Reviewed by Fiona Corbin

Review: A study which compares the performance of the MDRD and Cockcroft and Gault equations for estimating Glomerular Filtration Rate (GFR) in patients with a mean age of 80 years (range 69-92 years). The result provides 'some evidence that the MDRD equation works reasonably well' when used in older people. The Cockcroft and Gault equation tended to yield lower estimates of GFR than the MDRD equation.

Comment: This is an interesting and clinically useful paper.

28-292 Drug-induced acute kidney injury

Rajakaruna GK, Butt TF. *Adverse Drug React Bull.* August 2007. No.245. p.939-42.

Reviewed by Damien Hannah

Review: Acute kidney injury (AKI) is considered by classifying into prerenal, renal or postrenal causes. Prerenal causes include vasoconstrictive medications and medications that alter glomerular haemodynamics. Renal causes include acute tubular cell toxicity, acute interstitial nephritis, osmotic nephrosis and drug-induced thrombotic microangiopathy. Post renal causes considered are crystal deposition and rhabdomyolysis. The review describes mechanisms of AKI and gives examples. The article concludes that an understanding of the mechanisms of nephrotoxicity may allow for well tolerated use of nephrotoxic drugs and reduce the prevalence of drug-induced AKI.

Comment: The approach is rather academic. The list of drugs cited is not comprehensive and little is offered concerning presentation or management of patients. A table of the offending agents would have been useful. Overall, the article is of limited practical value.

Neurology

28-293 Which nondrug alternatives can help with insomnia?

Whitworth J, Crownover BK, Nichols W. *J Fam Pract.* October 2007. Vol.56. No.10. p.836-7, 840.

Reviewed by Dr Bruce Adlam

Review: Evidence-based answer: Cognitive behavioural therapy (CBT) interventions – particularly stimulus control and sleep hygiene – are well-validated, effective treatments for chronic insomnia that are equivalent or superior to pharmacological interventions (strength of recommendation: A). However, the long-term efficacy of CBT interventions, and their successful implementation by primary care physicians is unclear.

Comment: This was a very small study but it does and gives further weight for CBT to be included as part of our GP training, together with the funding mechanisms that recognises the additional time required to undertake this type of therapy in the primary care setting.

Obstetrics

28-294 Treatment of nausea and vomiting in pregnancy – an updated algorithm

Einarson A, Maltepe C, Boskovic R, et al. *Can Fam Physician*. December 2007. Vol.53. p.2109-11.

Reviewed by Dr Mike Lyons

Review: Simple algorithm on the subject from the Motherisk series with explanation of the steps.

Comment: Drug of choice in Canada is delayed release Diclectin – 10mgs Doxylamine combined with 10mgs Pyridoxine – two at bedtime, one in the morning and another in the afternoon.

28-295 Adverse effects of angiotensin-converting enzyme inhibitors and angiotensin-II receptor blockers in pregnancy

Branch RL, Martin U. *Adverse Drug React Bull*. October 2007. No.246. p.943-6.

Reviewed by Damien Hannah

Review: The adverse effects of angiotensin-converting enzyme inhibitors (ACEIs) and angiotensin-II receptor blockers (ARBs) on foetal development are separately considered. Evidence of harm by both ACEIs and ARBs in the second and third trimesters is presented. These risks are well documented and consistent with the expected renal

effects of these drugs on both mother and foetus. Evidence of greater risk of major congenital malformation after foetal exposure to ACEIs in the first trimester is also presented. The most compelling being from an epidemiological study which demonstrated a 2.7 times greater risk compared to infants not exposed to antihypertensive medication. Less evidence is available about harm associated with ARBs in the first trimester but some case studies are presented. The authors conclude by outlining recommendations of the British Hypertension Society, the FDA, and the British National Formulary.

Comment: This bulletin highlights the importance of avoiding ACEIs and ARBs in women who intend to become pregnant. It also raises the importance of counselling all women of childbearing age taking these medications to consult with their doctor in the early stages of an unplanned pregnancy. It also serves as a reminder of how little evidence is available about safety of medications in pregnancy.

Oncology

28-296 Gaining ground on breast cancer

Esteva FJ, Hortobagyi GN. *Sci Am*. June 2008. Vol.298. No.6. p.34-41.

Reviewed by Dr Ron Vautier

Review: This article discusses the reasons why breast cancer survival rates are improving, including earlier detection, more accurate characterisation of particular types, and drugs (including combinations) that are specifically targeted to known molecules in and on tumour cells. It clearly describes and illustrates a number of the more important such receptors and the mechanisms by which their activation or inhibition can influence cancer cell survival.

Comment: This is a very impressive article. It should enable practitioners to genuinely encourage optimism in their breast cancer patients. Certainly read it if you want to find out what HER2 positive means, and how Herceptin works. Also to get an un-

derstanding into why these new drugs are so expensive.

Paediatrics

28-297 Adverse effects of methadone in children

Langford NJ, Ferner RE. *Adverse Drug React Bull*. June 2007. No.244. p.935-7.

Reviewed by Damien Hannah

Review: The focus of this article is childhood poisoning with methadone of which most cases occur in children under three years. Symptoms of intoxication are described. Management of methadone poisoning including supportive treatment and the use of naloxone are covered. Finally some strategies for prevention of poisoning are offered.

Comment: Practitioners may find this useful as a reminder that methadone poisoning may be considered with appropriate presenting symptoms especially if family members are known to be on the methadone programme. Prevention strategies could be reinforced by practice nurses or pharmacists.

Pain Management

28-298 Assessment of pain: a community-based diary survey in the USA

Krueger AB, Stone AA. *Lancet*. 3-9 May 2008. Vol.371. No.9623. p.1519-25.

Reviewed by Dr Tony Hanne

Review: This study used a random, phone survey to establish by keeping a diary the extent and severity of pain suffered by about 4000 individuals throughout the day. More than a quarter reported some pain at the sampled times. There was slightly more men in pain than women. Pain from the 20s to the 70s did not increase much. Interestingly a lower education and income corresponded to more reported pain. More pain not surprisingly was accompanied by less enjoyment of life except that pain during exercise and sport, and during gardening and mowing, seemed to be acceptable. Those with

much pain spent a lot more time watching TV!

Comment: This provides an interesting platform for appreciating the significance of pain in our patients. A weakness in the study lies in the response rate of only 37%. It is possible that those with pain were more willing to cooperate because they could talk about their suffering. (For Comment see 28-299.)

28-299 Depicting the pain profile with the diary-day method

Turunen JH. *Lancet*. 3-9 May 2008. Vol.371. No.9623. p.1482-3.

Reviewed by Dr Tony Hanne

Review: See 28-298.

Palliative Care

28-300 Care for all at the end of life

Murray SA, Sheikh A. *BMJ*. 26 April 2008. Vol.336. No.7650. p.958-9.

Reviewed by Dr Bruce Foggo

Review: The *BMJ* recently ran a series of articles under the banner 'Making a Difference' and asked readers to vote to decide which of six projects would make the most improvement to patient care. The projects prioritised by voters were: Palliative care beyond cancer (38%); Drug resistant infections in poor countries (22%); Multiple health problems in the elderly (17%); Management of chronic pain (12%); Excessive drinking in young women (8%); Adverse drug reactions in elderly people (3%). The palliative care article from Scott Murray and Aziz Sheikh reflects on the palliative care needs of patients in the community with non malignant disease and the need for the hospice 'cancer care' model to be extended to these patients. They describe three relatively distinct trajectories of final illness: Cancer – steady progression with usually a clear terminal phase; Organ failure – gradual decline punctuated by episodes of acute deterioration and often, an unexpected sudden death; Prolonged gradual decline associated with physical or cognitive

frailty. They make the point that while accurate prognostication is difficult, acknowledgement that a patient is on one of these trajectories should be a trigger to initiate end of life discussions and advanced care planning.

Comment: Scott Murray holds a unique post – Professor of Primary Palliative Care, St Columba Hospice, Edinburgh – and is an enthusiastic advocate for good general practice led palliative care for all. Aziz Sheikh is Professor of Primary Care Research and Development in the general practice section, University of Edinburgh. Summaries of the 'Making a Difference' articles can be accessed at <http://makingadifference.bmj.com/>

Physician-Patient Relations

28-301 Cross-cultural assessment and management in primary care

Pratt HD, Apple RW. *Prim Care*. June 2007. Vol.34. No.2. p.227-42.

Reviewed by Dr Michael Hewitt

Review: The terms of reference are defined, including race, culture, ethnocentric and eurocentric. Consideration of the culture of the patient and physician need to be assessed for best health outcomes.

Comment: Very much like our 'cultural safety' programmes.

Prescribing

28-302 Respiratory infection: patient satisfaction not linked to Rx writing

J Fam Pract. December 2007. Vol.56. No.12. p.1002.

Reviewed by Dr Bruce Adlam

Review: In this North American study, approximately half of all patients with an acute respiratory illness expect to receive an antibiotic prescription. However, patients' satisfaction with their visit is not related to the receipt of an antibiotic. Patients who felt they gained a better understanding of their symptoms from their physician were more likely to be satisfied than patients who didn't get any explanation.

(Original article reviewed: *Ann Emerg Med* 2007; 50:213-20.)

Comment: Note: the authors claim about 70% of patients visiting family physicians or paediatricians for the treatment of a respiratory tract infection will receive a prescription for an antibiotic. Physicians usually assume that their patients will not be satisfied without one. I'd be surprised if it was as high as this in NZ.

Preventive Medicine and Screening

28-303 Fetal, childhood, and adolescence interventions leading to adult disease prevention

Pratt HD, Tsitsika AK. *Prim Care*. June 2007. Vol.34. No.2. p.203-17.

Reviewed by Dr Michael Hewitt

Review: The major diseases causing death in adults could have been modified and prevented by appropriate lifestyle choices in early childhood and adolescence. The author advises on strategies to facilitate this learning process in at risk populations by the primary care provider.

Comment: Us too!

28-304 Complete health checklist for adults – update on the Preventive Care Checklist Form

Iglar K, Katyal S, Matthew R, et al. *Can Fam Physician*. January 2008. Vol.54. p.84-8.

Reviewed by Dr Mike Lyons

Review: 2007 update on Preventive Care Checklist recommendations from the Canadian Task Force on Preventive Health Care. List under Bold = good evidence, italics = fair evidence, plain text = guidelines from other Canadian sources. Separate forms for males and females.

Comment: Comprehensive – but still room for individualisation and controversy. Issues of debate may include cognitive and fall assessment in the elderly, colorectal cancer screening, clinical breast examination, Pertussis acellular and HPV vaccines in teenagers, as well as syphilis, gonorrhoea and HIV screening in high risk individuals. Website for forms in references.

Psychiatry and Psychology

28-305 Can people with mild to moderate dementia provide reliable answers about their quality of life?

Trigg R, Jones RW, Skevington SM. *Age Ageing*. November 2007. Vol.36. No.6. p.663-9.

Reviewed by Fiona Corbin

Review: The researchers test the reliability of a new measure of self-reported Quality of Life (QoL), the Bath Assessment of Subjective Quality of Life in Dementia, in 60 patients with mild to moderate dementia recruited from a memory clinic in the UK. Cognitive impairment and reduced insight have previously been seen as barriers to completion of self-reported QoL assessments in dementia.

Comment: The study involves reasonably complex, 'technical' statistical methods and was inaccessible in parts. The results suggest that people with mild to moderate dementia are able to complete standardised self-reported QoL assessments and it is feasible to use aggregated data from these completed assessments to explore subjective experiences of people with dementia.

28-306 Treating depression in alcohol misuse

Drug Ther Bull. February 2008. Vol.46. No.2. p.11-4.

Reviewed by Fiona Corbin

Review: The focus of this article is treatment of unipolar depression in people who misuse alcohol. The authors review psychological and drug treatments used in addressing alcohol misuse as well as the apparently scant available evidence relating to treatment of depression in patients with co-morbid alcohol misuse issues. The bottom line is that 'where a patient is depressed and also misuses alcohol, the ideal treatment strategy is to aim for abstinence from alcohol first. This is because the depressive symptoms often remit within around two weeks of abstinence'.

Comment: This article includes some mind-boggling data relating to the burden of alcohol related health problems in the UK.

28-307 The neurobiology of trust

Zak PJ. *Sci Am.* June 2008. Vol.298. No.6. p.62-7.

Reviewed by Dr Ron Vautier

Review: Following on from mammalian studies showing that oxytocin facilitates social cooperation (in addition to its role in parturition and lactation), ingenious studies with people have shown that when we feel trusted by a stranger we have a release of oxytocin, which affects parts of the brain involved in controlling emotions and social behaviour, and also feel rewarded by a release of dopamine in the midbrain. Intranasal application of oxytocin makes subjects more trusting and more generous. There are individuals who do not exhibit these responses, and in some cases this may correspond with a social pathology. When male subjects are distrusted they show a rise in dihydrotestosterone and an aggressive response, not seen in females.

Comment: This article provides some fascinating new insights in to what makes us tick, and is highly recommended.

Public Health

28-308 Finding long-term solutions to the world food crisis

Editorial. Lancet. 26 April - 2 May 2008. Vol.371. No.9622. p.1389.

Reviewed by Dr Tony Hanne

Review: Food is essential to health, therefore the current escalation in basic food prices worldwide is our business. In the last year the prices of wheat, rice and other grains have risen by over 100%. The result is a steady increase in the proportion of hungry people. There are a number of causes including rising population, climate change, switching to bio-fuels, agricultural subsidies in Europe and North America, and, of course, unrestrained corporate greed. Economic growth in some countries has increased demand for meat which uses nine times as much grain to produce 1kg of food.

Comment: The contrast between a billion people who are malnourished and a billion who are seeing an obes-

ity fuelled diabetes epidemic among them is, frankly, immoral.

28-309 What is the best portable method of purifying water to prevent infectious disease?

Oldham D, Crawford P, Nichols W. *J Fam Pract.* January 2008. Vol.57. No.1. p.46-8.

Reviewed by Dr Bruce Adlam

Review: There isn't a single best method, but there are five that adequately purify water according to Environmental Protection Agency (EPA) standards. These include: (1) boiling for one minute if below 2000m (6562 feet) and three minutes if above, (2) chlorine dioxide tablets, (3) MIOX purifier, (4) ultraviolet light (SteriPEN), (5) portable filtration with a absolute pore size <1 micrometer combined with halogenation or charcoal filtration (Strength of recommendation (SOR=C)). The overall top three scoring products were: (1) the SweetWater Purifier from Mountain Safety Research, (2) the Micropur MP 1 tablets from Katadyn North America, Inc, and, (3) the First Need Deluxe water purifier from General Ecology, Inc.

Comment: Good article for trampers and travel doctors.

Respiratory System

28-310 Pneumonia: 3 to 5 days of antibiotics is as effective as 10 days

J Fam Pract. December 2007. Vol.56. No.12. p.1003.

Reviewed by Dr Bruce Adlam

Review: Yes. In the inpatient setting, a 10- to 14- day course of antibiotics is no more effective for patients with community-acquired pneumonia than three to five days of treatment. Clinical failures and mortality were similar regardless of treatment length. This study demonstrated equivalent effectiveness for oral or parenteral azithromycin for three to five days, levofloxacin for five days, cefuroxime for seven days, and intravenous ceftriaxone for five days. Level of evidence = 1a. (Original article reviewed: *Am J Med* 2007; 120:783-90.)

Screening

28-311 START (screening tool to alert doctors to the right treatment) – an evidence-based screening tool to detect prescribing omissions in elderly patients

Barry PJ, Gallacher P, Ryan C, et al. *Age Ageing*. November 2007. Vol.36. No.6. p.636-8.

Reviewed by Fiona Corbin

Review: An objective of this study was to devise and validate a screening tool to detect prescribing errors of omission in the elderly (aged 65 years and over) – i.e. the failure to prescribe drugs that are clearly indicated and likely to benefit the patient. Having done this, the researchers used this tool to determine the prevalence of omission of indicated medicines in a population of older people hospitalised with acute illness in Cork, Ireland. The results suggest a high prevalence of failure to prescribe appropriate medicines in this environment, with one or more prescribing omissions detected using the START tool in 57.9% of study patients. The researchers also calculated the cost of prescribing the indicated, but omitted, medicines.

Comment: The authors point out that validated screening tools such as START may be useful aids to systematic identification of appropriate omitted medicines in clinical practice. However, the real clinical value of such tools remains unclear. For instance, whether their regular use in day-to-day clinical practice results in significantly reduced morbidity or mortality, or routine use leads to significant savings on drug expenditure is unclear. This paper was my pick of the bunch for this issue of *Age and Ageing*.

Smoking

28-312 Smoking cessation: tactics that make a big difference

Coffay AO. *J Fam Pract*. October 2007. Vol.56. No.10. p.817-24.

Reviewed by Dr Bruce Adlam

Review: Quitlines, Web support, text messaging, and drugs improve quit rates – if you and your staff set the

stage. Practice recommendations (Strength of recommendation): (a) Telephone counselling improves both quit rates and long-term abstinence rates (A); (b) Web-based cessation programs also help to support smokers in all stages of quitting (B); (c) Pharmacotherapy and counselling improves abstinence (A); (d) Train your office staff to assist in the identification and counselling of smokers (A). This study asks us to set the stage with an 'ask and act' strategy: (1) Ask each patient about his/her smoking status; (2) Advise each patient who smokes that they need to stop smoking; (3) Assess your patient's willingness to make a quit attempt in the next 30 days; (4) Assist your patient either in making this quit attempt or in motivating them to consider a quit attempt later; (5) Arrange close follow-up of any quit attempts to help prevent relapse.

Comment: In a Cochrane Review of 39 trials including 31 000 smokers, five revealed that even brief advice – simply encouraging patients to quit – was statistically significant (odds ratio = 1.74; [95% CI 1.48, 2.05]).

28-313 Hooked from the first cigarette

DiFranza JR. *Sci Am*. May 2008. Vol.298. No.5. p.60-5.

Reviewed by Dr Ron Vautier

Review: New research indicates that it is very common for people to become addicted after just a few cigarettes, and fMRI studies appear to delineate the parts of the brain where altered physiology occurs. The author derives a 'sensitisation-homeostasis' theory which postulates that nicotine is addictive because it suppresses craving rather than produces pleasure.

Comment: I think this article will interest and provide valuable insight for anyone treating any form of addiction.

Sports and Exercise Medicine

28-314 How do exercise and diet compare for weight loss?

Cudjoe S, Moss S, Nguyen L. *J Fam Pract*. October 2007. Vol.56. No.10. p.841-2, 844.
Reviewed by Dr Bruce Adlam

Review: Evidence-based answer: Exercise alone produces short-term weight loss that is comparable with that induced by diet, after which a plateau in weight loss appears to occur (strength of recommendation [SOR]: B). Exercise in combination with diet promotes maintenance of weight loss above either intervention alone in both obese and overweight men and women (SOR: A). Exercise-induced weight loss has been shown to preferentially reduce abdominal fat and increase lean skeletal muscle compared with that induced by diet (SOR: B). Multiple short bouts of exercise per day are as effective as a single long bout in producing weight loss (SOR: B). Adherence improves when exercise can be completed at home or home equipment is used (SOR: B).

28-315 Hormonal responses to a 160-km race across frozen Alaska

Kraemer WJ, Fragala MS, Watson G, et al. *Br J Sports Med*. February 2008. Vol.42. No.2. p.116-20.

Reviewed by Dr Chris Milne

Review: Blood samples were analysed from 16 men before and after the race. Results for testosterone, interleukin-6, growth hormone and cortisol suggested some suppression of the hypothalamic-pituitary-gonadal axis. This was probably mediated by an amplification of adrenal stress responses to such an ultra-endurance race in environmentally stressful conditions.

Comment: Bringing this closer to home, a mild form of HPA axis suppression probably occurs in most of those athletes who compete in the coast to coast event each year.

28-316 Do you get value for money when you buy an expensive pair of running shoes?

Clingham R, Arnold GP, Drew TS, et al. *Br J Sports Med*. April 2008. Vol.42. No.3. p.189-93.

Reviewed by Dr Chris Milne

Review: In a word – no. In the three brands tested in this study, expensive shoes did not provide better

cushioning than the cheaper shoes within the same brand. Plantar pressure was lower overall in the cheaper shoes, and comfort was independent of plantar pressure or price.

Comment: A useful paper to share with your running/jogging patients. Not surprising really, when you consider that the cost of the materials and manufacture is small compared with the mark-up and marketing budget of major sports shoe manufacturers.

28-317 The key to top-level endurance running performance: a unique example

Lucia A, Olivan J, Bravo J, et al. *Br J Sports Med.* April 2008. Vol.42. No.3. p.172-4.

Reviewed by Dr Chris Milne

Review: These Spanish authors studied Tadesse Zerisenay, an Eritrean runner who won the world cross country championship over 12km in 2007. His vital statistics – height 1.63m, weight 54kg, BMI 20.3 and his leg length was 54% of his overall height.

Comment: The most impressive feature however, was his running economy – he used only 150ml of oxygen per kilogram of body weight per km. This compares to a figure of 192 for elite Kenyan runners. Running economy, helped by a small frame and skinny legs is a major factor in winning distance races. Ponder this as you watch the Beijing Olympics.

28-318 IOC consensus statement: 'training the elite child athlete'

Mountjoy M, Armstrong N, Bizzini L, et al. *Br J Sports Med.* April 2008. Vol.42. No.3. p.163-4.

Reviewed by Dr Chris Milne

Review: An expert panel of reviewers (including our own Dave Gerrard) looked at the evidence on training elite child athletes. Aerobic training is recommended at three to four sessions per week of 40–60 minutes, at an intensity of 85–90% maximal heart rate. Anaerobic training includes exercise at an intensity of over 90% maximal heart rate for less than 30 seconds. The panel made no recommendation regarding the frequency of anaerobic training sessions. Weight training was mentioned also.

The panel recommends a minimum of two to three sessions per week, with three sets, an intensity of 50–85% of the one repetition maximum (1 RM). There are also recommendations regarding nutrition, prevention of burnout and eating disorders.

Comment: A succinct balanced overview from world experts.

28-319 The early management of muscle strains in the elite athlete: best practice in a world with a limited evidence basis

Orchard JW, Best TM, Mueller-Wohlfahrt H-W, et al. *Br J Sports Med.* April 2008.

Vol.42. No.3. p.158-9.

Reviewed by Dr Chris Milne

Review: This review arose out of a 'think tank' on muscle strains held in London in December 2007. The most controversial aspect is the work by Dr Hans-Wilhelm Mueller-Wohlfahrt of Munich, Germany who has treated thousands of professional football players with injections of local anaesthetic followed by Actovegin (a physiological amino acid mixture) and Traumeel S (a homeopathic formulation) on days 0, 2, and 4 after a muscle strain.

Comment: Although the level of evidence for this treatment is low, the same is true for most other recommendations regarding acute muscle strains. We need to try and do better. Double blind placebo controlled studies would help, but there do not seem to be many elite athletes lining up to participate in such studies. For the present, anecdote rules ok.

28-320 Should ECG be required in young athletes?

Chaitman BR, Fromer M. *Lancet.* 3-9 May 2008. Vol.371. No.9623. p.1489-90.

Reviewed by Dr Tony Hanne

Review: There is a growing move to require screening of competitive athletes to detect abnormalities which might make them at risk of sudden cardiac death during sport. This begins with a medical history, often physical examination and more commonly now ECG or even echocardiograms. The Olympic commit-

tee will require ECGs of all athletes in Beijing. Surprisingly the Americans have been slower than the Europeans to advise travelling this path. There is no good evidence that ECGs are an effective way to protect athletes.

Comment: If as GPs we are to encourage and support greater participation in exercise to improve health we may also need to be guardians against unnecessary barriers, including expense, against young people forsaking the playstation for the playing field. The ECG changes which might indicate significant abnormality in young people are subtle. It is unlikely that most non-cardiologists would feel confident to recognise them reliably.

Urology

28-321 How should you further evaluate an adult with a testicular mass?

Barnhouse K, Powers A. *J Fam Pract.* October 2007. Vol.56. No.10. p.851-3.

Reviewed by Dr Bruce Adlam

Review: Evidence-based answer: Perform a scrotal ultrasonography immediately to determine whether emergency surgery is necessary for patients with an exam or history that suggests testicular torsion or rupture (strength of recommendation: B). In less urgent cases, ultrasound is also useful for verifying diagnoses made by physical exam, and to exclude conditions such as neoplasm. MRI can provide additional information to improve management and decrease unnecessary surgery (SOR: B).

Vaccination and Vaccines

28-322 Emerging vaccines – evidence and considerations for practice integration

Moss SM. *Can Fam Physician.* December 2007. Vol.53. p.2150-6.

Reviewed by Dr Mike Lyons

Review: Outlines the place of Quadrivalent (A, B, C, Y and W-135

serogroups) conjugate meningococcal vaccine, Rotavirus vaccine, HPV vaccine, Herpes Zoster vaccine and Varicella vaccine in Canadian general practice. Follows the format: (1) Is the vaccine recommended? (2) What are the side effects of the vaccine? (3) Will the vaccine protect my child (over 60-year-olds for the Zoster vaccine)? (4) How long will the vaccine protection last?

Comment: More objective information than your local pharmaceutical rep may drop in to you!

28-323 The HPV vaccine – an analysis of the FUTURE II study

Howard M, Lytwyn A. Can Fam Physician.

December 2007. Vol.53. p.2157-59.

Reviewed by Dr Mike Lyons

Review: Critical appraisal of the phase three randomised double blind placebo controlled trial of 12 000 women in 13 countries, mainly European, who were involved in the assessment of Gardasil vaccine. Primary outcome was CIN 1,2,3 or invasive carcinoma of the cervix related to HPV 16 or 18. Secondary outcomes included the incidence of each lesion type. The vaccine did not alter the course of the lesions related to HPV 16 or 18 already present. The vaccine was also not efficacious for protecting against CIN 3 or adenocarcinoma in situ when considering all HPV types. Average follow-up was only three years. Bottom line – Gardasil has high efficacy for preventing HPV types 16 and 18, high grade CIN and cervical cancer among sexually active women aged 15–26 years with no prior infection with these types and moderate efficacy among a general population of women. CIN grades 2 and 3 associated with HPV types 16 or 18 often occur within two years of infection and 25% of CIN grade 2 lesions progress to CIN grade 3 or worse in two years.

Comment: The vaccine is free in Australia and public funding has begun in Canada. The optimum age for vaccination is debated. Vaccines still require regular cervical screening.

Instructions for authors

New Zealand Family Physician publishes original papers on general practice and family medicine. We encourage editorials, case reports and invite readers to contribute to regular features.

Manuscripts

Manuscripts may be submitted in printed or electronic format, preferably the latter. If possible the article should be submitted on a 3.5 inch disk in Word format, or emailed to the address below as an attachment. Where possible use standard fonts (such as Arial or Times) and keep formatting to a minimum. Please send a covering letter signed by all authors stating that the manuscript is original, has been read and approved and that no part of it has been submitted for publication elsewhere. We ask that the manuscript is no longer than 2500 words and that the style conforms to that detailed in 'Uniform requirements for manuscripts submitted to biomedical journals' (<http://www.icmje.org/>). Text should be double spaced and pages numbered. Display on a separate title page the title of the paper, author's name (first name, initial, surname) and degrees; up to three key words; a brief curriculum vitae (about two sentences) for each author, name and address of author to whom communications should be sent; acknowledgments of grants. Begin the text with an abstract of less than 150 words. Abbreviations should be kept to a minimum. Use SI units throughout. Photographs of authors are welcome and should ideally be provided in digital (jpg) format.

Ethical approval

Reports of research projects involving human subjects should include a statement indicating that the project has received ethical approval.

References

Refer to published material by inserting numbers serially in the text. List no more than 20 references on the last page in the order cited in the text. Abbreviate journal names in the style of Index Medicus, and refer to journal articles as follows: authors' surnames and initials, title of article, abbreviated name of journal, year, volume number, first and last page numbers. Refer to books as follows: authors, title of chapter, title of book, edition, publishing house and city, year, page numbers referred to. Check the accuracy of every reference.

Illustrations

Graphs, charts and line drawings should be clean, sharp, black on white and of high standard of reproduction. Photographs must be of a professional standard, must show clear detail, and should ideally be submitted in digital (jpg) format.

Competing interests

All authors will be asked to declare competing interests.

Publishing dates

New Zealand Family Physician is published six times annually, in February, April, June, August, October and December. Original papers are submitted to referees before being accepted for publication, and are published as soon as space permits.

Subscriptions

The journal is provided free to all members of the RNZCGP. Rates for others are \$132 per year within New Zealand, \$174 outside New Zealand (including postage). The Royal New Zealand College of General Practitioners, P O Box 10440, Wellington, New Zealand.

Editor

Andrew Stenson MSc (Guest Editor).

Editorial Board

Dr Bruce Arroll, Dr Andrew Divett, Professor Tony Dowell, Dr Pamela Hyde, Professor Marjan Kljakovic, Dr Lynette Murdoch, Mr Andrew Stenson, Dr Jocelyn Tracey, Dr Jo Scott-Jones.

Emeritus Editors

Dr Tony Townsend, Professor Campbell Murdoch, Dr Ian St George, Dr Tessa Turnbull, Dr Rae West, Dr David Cook.

Management

Hugh Sutherland

Designer

Robyn Atwood

Advertising enquiries:

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

All other correspondence to:

Cheryllyn Borlase, Publications Coordinator
Royal New Zealand College of General Practitioners
P O Box 10-440, WELLINGTON
Email: nzfp@rnzcgp.org.nz

The *New Zealand Family Physician* is the official journal of the RNZCGP, however, views expressed are not necessarily those of the College, the editor, or the editorial board.

Copyright Royal New Zealand College of General Practitioners 2008.
All rights reserved.

